ROCKY MOUNTAIN MEDICAL JOURNAL

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November 1960, Volume 57, Number 11

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Watch Out!

IT IS QUITE POSSIBLE the powers that be in Washington have more than one reason for complaining about the prices of drugs. Senator Estes Kefauver's drug price investigating subcommittee would have us believe that the government's sole interest is "simply with the price of drugs — a price which must be paid by someone under any system of medical care." I think there is a psychological reason which they hope to keep under cover. This Senate antitrust investigation is just another cunning approach in the attempt to slip socialized medicine in at the back door. It appears to me that Mr. Kefauver almost gave this fact away in his opening statement when he said: "It is not the purpose of these hearings to question in any way the American system of private medical practice." I react to this statement in the same manner I would if a small boy should rush into my office and exclaim: "Doctor, someone batted a baseball through your back window—and I don't want you to think that I did it."

If these investigators' thoughts were just in the drug field, they should also be concerned about quality as well as price. They certainly have shown a lack of interest in the cost of pharmaceutical research and manufacturing, and without research drugs would soon degrade in both quality and quantity. The Senator's line of reasoning in advocating that druggists be allowed to use generic instead of brand names, would throw the drug business into a tail spin within a short time. If one company spends a million dollars to produce a new drug, and another concern is allowed to copy the formula, pay none of the research cost, and market the product at a low price, the results would be disastrous. The better firms would go broke, initiative to find new drugs would be smothered and we would find ourselves advancing in reverse--back towards the "calomel and castor oil days."

I feel that these governmental probes are motivated, primarily, for publicity. If they can attract enough attention by their investigations of the major drug maufacturing firms, and lead the American people into believing that the prices of drugs are too high, it might be possible to gain a large number of sympathetic listeners.

They hope to stir up enough interest in the drug controversy to swing the spotlight away from the doctors for a while, give us a breathing spell, make us feel complacent and lessen our vigil against legislation like the Forand bill. It is their wish that we don't get wise to their twofold purpose of these investigations in relation to the Forand bill itself. First, they will attempt to convince the lay public that older people, on Social Security, will not be able to pay the high drug prices—and that the government should step in to help. Second, if these tactics could get a Forand type of legislation passed without enough medical publicity to stir up strong opposition—they would be in position to widen Social Security to cover everybody. Then we would have socialized medicine under another name.

People, consciously, or unconsciously, associate drugs and physicians together. An aroused populace against drug prices would not be too friendly towards the medical profession. Such a situation would gain recruits for a more effective battle against the free practice of medicine. While we sit on the side lines, apparently unmolested, and watch the steam roller attempt to crush the drug firms, we must remain alert. We could get caught napping like Hitler did one time during World War II—when the Allied soldiers were issued heavy, long-handled underwear. As soon as the Germans got wind of it, they rushed up to Norway while our troops poured into Africa. It behooves us to watch out for all sorts of misleading tactics, because this drug battle is only a sham attack. The medical profession is their chief objective. They

hope to find time to reorganize their forces, turn upon us without warning and launch a surprise attack where and when we might least expect it.—F. Clyde Bedsaul, M.D., in the Virginia Medical Monthly.

Dr. B. L. Gordon To Be J.A.M.A. Associate Editor

Dr. Burgess Lee Gordon, for the past three years director of education at the Lovelace Foundation, Albuquerque, N. M., has been appointed associate editor of the Journal of the American Medical Association.

Dr. Gordon was Clinical Professor of Medicine at Jefferson Medical College, Philadelphia, for four years, and from 1951 to 1957 served as President of the Woman's Medical College in that city.

The Shape of Things to Come

Members of the Denver Medical Society recently met for a social and dinner meeting followed by a subject for discussion announced as "Community Medical Staff Interparticipation at Denver General Hospital."

Each member had received a letter over the signature of the Chairman of the Program Committee which furthermore stated that the "title means we will get some straight dope on the situation at Denver General Hospital." We were told that we would "hear first hand not only about the proposed improvement of the Hospital's physical facilities, but also the part which we as physicians will have in maintaining Denver General as a good hospital." Mr. Ross Garrett, Hospital Survey Planning and Management Consultant for the Board of Health and Hospitals, was the speaker. Interest in the proposed discussion was amply demonstrated by record attendance—and all present paid courteous, hopeful, and expectant attention to the bitter end. But all we heard about was hospital construction and saw a few projected pictures of representative cubicles and conveniences to make things pleasant for patients and easy for the nurses. Emphasis was placed upon the circular construction of wards, with nurses' stations in the center, like the hub of a wheel and no more than 25 feet from any bed. One of the listeners interjected the comment that this plan was introduced in the year 1430 at the Hotel Dieu in France!

Nothing was said of medical interparticipation; the "straight dope on the situation" was conspicuously absent. When the speaker departed, a few frustrated listeners had the courage to inquire whether we had spent an evening to hear about bricks and to note the absence of brains. The latter were known to be present, residing unproductively within the cranial vaults of medical school faculty members, among others who have long been interested in the subject we came to hear and in the hospitals concerned. Colorado General was just barely mentioned in passing, no insight was engendered, and no questions answered despite the fact that President Charles Freed offered privilege of the floor to anyone.

Which leaves us where we started—depending upon the newspapers for our information. The latest as of September 9, 1960, is summed up under the heading "Last Rites Conducted for DGH-CU Tieup." The concluding paragraphs in this article state, "Should the university wish to develop any of the modified programs at DGH, its suggestions would be submitted to the board for that group to develop unilaterally.

"At the end of the release the CU representatives routinely affirmed their willingness to review any possible future programs developed by the Board. CU's unswerving policy in the past has been to refuse to accept any such policy change unless it had a voice of authority."

This answers a lot of questions, unfortunately to the public rather than to the loyal members of the profession, first hand. We wish both institutions well, for each has an important role to fulfill in medical training and patient care. We believe that an able and enthusiastic staff at Denver General Hospital will meet the challenge and that the new Denver General Hospital will build and carry on creditably upon the foundation of its illustrious past.

In the vital months ahead . . .*

Consulite vobis, prospicite patriae, conservate vos

Cyrus W. Anderson, M.D., Denver

EVERY INCOMING PRESIDENT must feel the weight of responsibility suddenly thrown upon his shoulders, so much so that HIS year ahead looms up as the critical point in history, the crisis, the fork in the road from whence the society advances or skids downgrade to more or less oblivion. This year is no exception. Your humble servant feels very keenly the weight on his shoulders and very seriously worries that this may be a very critical year, not only for this Society but for the entire medical profession and for the United States of America.

First of all, your State Society is embarking on a streamlined ship; not a new one but a very satisfactory old one that has been completely overhauled with new machinery which requires a considerably smaller number of faithful volunteer firemen to stoke the boilers. We do not wish to appear ungrateful but this, we think, will be to our advantage. It will increase our speed but the loss of ballast with the elimination of many committees could make us top-heavy and in case of storm the sailing may not be as smooth and could even be to our detriment. However, we pondered long and hard before we even suggested the changes in streamlining. I beg your indulgence and plead for your help.

The national political picture is our greatest worry, even in the face of a very substantial victory in Congress with the temporary defeat of the Forand type legislation and our own exclusion, still, from compulsory Social Security taxes. But this is no time to let our guard down. The big fight is still ahead. The 1960 Democratic platform reads almost identical to the platform of Norman Thomas' Socialist Party of 1928 and the Republican platform is only slightly less undesirable. You have heard the statements of both President and Vice President team candidates. The medical profession has a challenge to meet. We must halt the drift toward a political Utopia where all you have to do is vote for a living. There is one thing we must realize—and quickly—and that is that we cannot continue deficit financing, passed off as of little importance by the spenders, and retain our power as a nation. Above all things, if we, as represented by our Congress, are determined to spend money for anything and everything, then we should at least have the fortitude to pay our way as we go. Maybe the increased taxes this would entail would jolt us to our senses.

1932 platform violated

Twenty-eight years ago the leaders of the Democratic Party sensed the popular feeling against the trend towards a managed economy and they drew up a platform that showed real genius. This 1932 Democratic Platform read in part:

"We advocate: (1) An immediate and drastic reduction of governmental expenses by abolishing useless commissions and offices, consolidating departments and bureaus and eliminating extravagance, to accomplish a saving of not less than 25 per cent in the cost of federal government.

"(2) Maintenance of the national credit by a federal budget annually balanced.

*Presidential address, delivered September 17, 1960, before the 90th Annual Session, Colorado State Medical Society, Estes Park, Colorado.

"(3) A sound currency to be maintained at all hazards."

The true history of this era and of the man who rode into the Presidency on the most American free enterprise platform that was ever written is most interesting but is not known to many.

The people thought from this Democratic platform and because of their desires, that what the New Deal promised was relief from governmental interference with business. What happened? Accompanying the new President to Washington in 1933 were great hordes of the disciples of planned economy. The people laughed heartily at the thought of impractical professors scrambling into political office and running things. They did not realize that these men were ardent believers in an authoritarian state, well prepared by their studies and determined to take over the control of the country.

What then happened in the next few months is intensely interesting but time will not permit reviewing it. Needless to say, the platform was reversed.

In the meantime Communist enterprise has conquered one-third of the earth's surface outright, paralyzed another one-third and brought the remainder under siege. What is now at issue for the United States is not merely a new division of world power, it is survival.

Many areas need correction

Congressman Bruce Alger (R. of Texas) and others have repeatedly pointed out the ills which demand "Healing the Body Politic." Congressman Alger cites 21 different areas in which there is an absolute demand for correction. According to the Congressman these evils run the gamut of federal activities including (1) taxation where we now have in effect a full-flowered Communist plan, (2) the Supreme Court which frequently and erroneously interprets the "intent" of Congress and reinterprets the Constitution regardless of "stare decises," (3) the staggering federal debt, and (4) a twofold problem, (a) labor's annual demand for more pay beyond productivity and (b) government spending beyond its income while politicians simultaneously promise federal handouts, bigger federal spending and tax cuts. Undoubtedly some politicians believe that the American people have become so infected with the virus of "something for nothing" that they have lost whatever self-respect and patriotism they once had and now measure their freedoms by the size of the handouts doled out to them by the federal government. It is downright cruel to delude people into thinking that genuine social security or welfare can result from financial irresponsibility.

One explanation for all of this is that there has always been a strong American tendency, inherited perhaps from our Puritan ancestors, to feel that we are our brothers' keepers. This makes us feel that we ought to do good to our neighbor, whether he wants us to or not, and that we ought to compel him to do what we think is good for him whether he wants us to or not. We feel that we are benefiting him, and that makes us feel virtuous!

Whenever an individual (or group of individuals—the condition is contagious and more or less endemic) comes to feel that the voluntary way of life no longer will suffice to supply the needs of the community, he is suffering from moral schizophrenia. Many good and righteous persons with the best of intentions, because of their haste to do good in what appears to them to be an urgent situation, become victims of this syndrome. Through the mechanisms of a collective, and in this day and age that means taxes, their good intentions take the form of reaching into the other fellow's pocket for the money with which to make a gift. The graduated income tax gives the Internal Revenue Department a license to steal, in that it is confiscatory.

F. A. Harper has expressed this idea in a pamphlet entitled "Morals and the Welfare State." He says: "Laudable objectives alone do not assure the success of any program. A fair appraisal of the program must include an analysis of the means of its attainment. While we are good and righteous persons in our individual conduct and in our home community and in our basic moral code, we have become thieves and coveters in the collective activities of the welfare state in which we participate and many of us extol." Still quoting Mr. Harper: "When thievery is resorted to for the means with which to do good, com-

passion is killed. Those who would do good with the loot then lose their capacity for self-reliance, the same that a thief's reliance atrophies rapidly when he subsists on food that is stolen. And those who are repeatedly robbed of their property simultaneously lose their capacity for compassion. The chronic victims of robbery are under great temptation to join the gang and share in the loot.

"They come to feel that the voluntary way of life will no longer suffice for needs; that to subsist they must rob and be robbed. They abhor violence, of course, but approve of robbing by peaceful means.

"Once a right to collective looting has been substituted for the right of each person to have whatever he has produced, it is not at all surprising to find the official dispensers deciding that it is right for them to loot the loot—for a worthy purpose, of course. Why not? If it is right to loot, it is right to loot the loot. If the latter is wrong, so is the former.

"Unless we destroy the virus of immorality that is imbedded in the concept of the welfare state, unless we come to understand how the moral code of individual conduct must apply also to collective conduct, because the collective is composed solely of individuals, thievery and covetousness will persist and grow and the basic morals of ourselves, our children and our children's children will continue to deteriorate. Moral individual conduct cannot persist in the face of collective immorality under the welfare state program. One side or the other will have to be surrendered." That is the end of the quotation.

Our legislators are, for the most part, honorable men. They are sincerely trying to do what they consider to be a necessary and not always too pleasant a job. When do any of them have the time to read the volumes upon volumes of testimony given in the various committees, let alone ponder over it? When do they have time to read the thousands upon thousands of letters and telegrams from their constituents, let alone weigh their contents? (For the most part it is probably count and weigh—without reading.) Is it any wonder they become confused?

To add to their confusion, they are surrounded by a group of so-called intellectuals, many of them college professors who from their constant practice in classroom lectures become masters of persuasiveness. But the sheltered lives, authoritative positions and lack of practical experience peculiar to these cloistered men are not always conducive to sound judgment. They befuddle the legislators by shouting in one breath that they are against socialized medicine, and in the very next breath screaming that voluntary insurance is failing to do the job so that medical care for the aged must be tied to Social Security.

These same academic economists advise, "What this country needs is more credit." Credit means the ability to borrow. Borrowing always produces debt. You can't have an extension of credit without an extension of debt. If the statement were made, "What the country needs is more debt," which is the other way of saying exactly the same thing, this same economist would be labeled a lunatic.

Likewise if an orator shouts, "The farmer must get more for his crops," he is applauded, but let him say, "Everyone must pay more for his food," and he would be left talking to himself.

So let us not bear down too hard on our legislators, let us see if we cannot correct our lines of communication wherein lies the cause of our dilemma. Communication of meaning from one mind to another is one of the most difficult of all processes. Many of us can remember when people who believed in liberty called themselves liberals. But that won't do anymore. The socialist intellectuals of today have subverted our language so that "liberal" means "illiberal." Freedom means slavery. Democracy means dictatorship of the proletariat. Justice means tyranny and peaceful coexistence, the ultimate serenity of an unarmed man in the jungle with a hungry tiger. After the tiger has eaten him, both are at peace.

"*Liberty Versus Liberals*"

An article entitled "Liberty Versus Liberals," written by Mrs. Ilanon Moon, a high school teacher of Latin in Conroe, Texas, and published in the August 29th issue of the Dan Smoot Report, should be read by every American. Quoting from this article, "Karl Marx considered the corruption of language the

necessary prerequisite to the Communist conquest of a nation. He said, 'The first step in the science of revolution is the art of confusing the public with words that have a pleasant meaning.'

"That the Communists are taking this step in the United States is clearly indicated by the present confusion in the meaning of the words 'liberal' and 'liberalism.' These terms have always been pleasant to American ears because our founding fathers taught us their original and true meaning. They are part of our heritage of freedom and belong to the nomenclature of our republic. The words 'liberal' and 'liberalism' come from the same source as 'liberty.' They are derived from the Latin liber which means 'free.'

"A free man, according to the Roman language and law, was one who could act according to his own will and pleasure. He was his own master, independent, unshackled, and with the right to exercise his full powers, mental, physical and moral. He voted as he pleased, and Roman law protected him against intruders in his home or his business affairs. Besides all these guarantees of personal liberty, Cicero emphasized freedom of thought and expression.

"Because they believed in this kind of liberty, our founding fathers who wrote the Bill of Rights were 'liberals.' Their political, economic, and social code was 'liberalism'; and liberalism meant the guarantee of every man's freedom from control by an all powerful government.

"Nobody seems to know just when or how the prostitution of these noble words began. But somewhere along the way in the last few years we have surrendered to that prostitution; and now 'liberals' generally believe in placing more and more power in the hands of the federal government.

"But because most Americans still believe in the true and original meaning of the word 'liberal,' it is a perfect instrument for subversion. Some politicians can play on it the old familiar tunes of liberty. But the accompaniment of the pseudo-liberal carries a counter melody composed by Lenin, Stalin and Khrushchev.

"Only one form of the Latin liber (from which our 'liberty' and its various companion words are derived) can be applied to those who want more and more government. That word is 'liberality.' 'Liberality,' the dictionary says, is free in 'giving, granting or yielding.' The big government advocates are very free with the U. S. Constitution. They will give it away to the subversives at home, grant it to the United Nations or yield it to the World Court. But a liberal, a *real* liberal, will surrender not one word of that Constitution, for the real liberal is a lover of 'liberty' and he knows that our Constitution is the guarantee of that liberty.

"Public confusion has reached dangerous proportions when the majority of people identify liberalism with big government while those who know better acquiesce in the fallacy.

"The cleavage between the words 'liberal' and 'conservative' which has developed in our language of recent years is both historically and linguistically erroneous.

"The word 'conservative' comes from the Latin 'conservare,' which means 'to save, guard or preserve.' The men who founded this republic were both liberal and conservative. In the creation of our government, their aim was to conserve the elements of Greek democracy, Roman republicanism and English common law in the exact proportion which would guarantee the individual liberty of every American citizen. A man, therefore, who wishes to remain free and at the same time conserve for future generations our heritage of liberty is neither a 'liberal' nor a 'conservative.' He is both, and being both, he is an American patriot.

"The confusion of our language will be complete if the word 'patriot' ever comes to mean 'international.'

"The Communists are working on that, now!" (end of quotation).

Last bastion of freedom

The United States was strong in years past because it had a public philosophy. Though the two political parties warred with each other, they shared common principles and a broad agreement on fundamentals and ultimates—a passionate belief that government interference in private affairs would destroy our liberties. This belief permeated the thinking of American leaders. Unhappily, this public philosophy has fallen into disuse.

Political leaders who adhere to it have become a dwindling minority. The result is that many Americans have become alienated from the inner principles of the republic. New men are coming into power who are alien to the traditions of the country.

The medical profession is the last great bastion of freedom in the United States. It is the one great nucleus from which a reversal of the trend could spring. The socializers are well aware of this and will be relentless in their efforts to slap on more government controls before we can realize and activate our potential. Can you think of any other organization of almost 200,000 well educated men with the advantage of daily personal contact with millions of people? People will lend an eager ear to one in whom they have placed their confidence and the responsibility for their continued health. I sincerely urge you all to make use of this potential. Become active in politics in every way that you can. Our nation confronts two major dangers; one from without: "Communist ideological and economic penetration." the other from within: "The loss of individual freedoms by a willingness to let the central government be all things to all people." Keep the above statement in mind as a measure by which you judge every candidate.

Familiarize yourselves with how your legislators voted upon vital questions concerning free enterprise, Social Security and welfare statism. Beware of candidates proposing a "bold new approach" involving the spending of money which we do not possess. Take a few extra minutes with each patient talking economics, Americanism, anticommunism. Include with your monthly statement a paragraph, or perhaps just a sentence, or a quotation expressing some sentiment to the effect that you like the American free enterprise system which has far surpassed those of every other country in the world. Talk, talk, talk—arrange friendly meetings with any Senator or Congressman that you know. Never refuse to speak before your service clubs, P.T.A. groups, church group or neighborhood gatherings. Write letters, personal letters, not only to your Congressmen but to your friends and patients. Get out the vote. Stress the dangers of inflation and our dwindling gold reserves.

These are just a few of the ways the medical profession can exert its tremendous political strength. The potential is there—our enemies know it. They are trying to destroy it. Let's make use of our political strength, *now*, while we still have it. Tomorrow may be too late! •

The importance of the public image versus reality

The importance of facing up to the challenge of the public image versus reality and recognizing "the cracks in medicine's mirror" was the theme of panel discussions at the opening session of the American Medical Association's 1960 Public Relations Institute.

In the keynote address, Pierre Martineau, director of research and marketing for the Chicago Tribune, declared that the public image of doctors and the A.M.A. will play a key role in the future course of political and public behavior involving the medical profession.

Citing numerous examples of people's reactions to certain products or brand names, Mr. Martineau made this point:

"Every brand that is well known at all is defined in the public mind partly by what it is but also, very importantly, by sets of psychological associations which may or may not be true. These persist almost like a halo attached to the product. Both of these constitute the brand image and it is this image that people react to reality. All of our stimuli from the outside are filtered through the images that we have of a particular situation."

Images are formed partly by experience but mostly by word of mouth, he said, and once they are formed they become stereotypes that are extremely difficult to alter. We bend actuality a little to fit the images, he added, and we believe what we want to believe.

Mr. Martineau pointed out, however, that images can be modified, but not simply by supplying facts and information. It is imperative, he said, to come to grips with the problem of the doctor and the A.M.A. as they really are and as they are seen by the public, politicians and intellectuals.

Gerald J. Skibbins of Opinion Research Corporation, Princeton, N. J., panel moderator, declared that all of our authorities and authority symbols are under major challenge to prove that they are worthy of the respect and attention of the people. A good, strong organization image, he said, requires positive, constructive actions that are then well interpreted. He added that bad works also must be explained and remedied.

Advances in cancer research and control*

John R. Heller, M.D., Bethesda, Maryland

The resources needed to find the causes and cures for cancer are within our grasp. Descriptions of the intricate pathways of research cannot help but give us a feeling of excitement and expectation.

CANCER IS THE SECOND MOST FREQUENT CAUSE of death in the United States. Only diseases of the cardiovascular system cause more fatalities. An estimated 450,000 new cancer cases are diagnosed every year, deaths total more than a quarter of a million annually, and there are at all times some 700,000 persons under treatment for malignant disease. If these trends continue at their present rates, 40,000,000 persons now living will develop cancer in their lifetimes, and 26,000,000 of them will die of it.

These statistics do not begin to describe the impact of cancer on the individual or his family. Let us discuss some of the paths research is taking in the effort to produce ways of controlling, and hopefully eradicating, cancer as a threat to the well being of men, women, and children everywhere.

There are four areas of cancer research to which I should like to devote particular attention: virology, chemotherapy, cytology, and epidemiology. Within recent years, achievements of the foremost scientific importance have been reported from each of these fields, and these achievements may profoundly influence our ability to control human cancer.

Viruses and cancer

The fascinating story of the relationship of viruses to cancer has been unfolding almost from the beginning of modern cancer research—that is, roughly, since the turn of the century. This line of research has brought to light some amazing information about animal tumor viruses and the cell components with which they appear to be intimately associated. As a result, many investigators, aided by valuable laboratory tools and technics, are intensifying their efforts in the study of the possible viral etiology of human cancer.

After Borrel's suggestion, in 1903, that cancer might be a virus disease, research in this infant field progressed slowly and virtually without enthusiasm on the part of the scientific world. The demonstration of a direct causal relationship between filterable viruses and malignant tumors in domestic fowl reported by Ellerman and Bang in 1908 and Rous in 1911 aroused only limited interest. The significance of this early work simply was not clearly understood. Almost a quarter century elapsed before the next major advances were reported: the discovery of the Shope rabbit papilloma virus in 1933, the Lucke virus of the leopard frog kidney tumor in 1934, and the Bittner mammary tumor virus of mice in 1936.

The contemporary period of cancer-virus research can be said to date from the observation by Gross in 1951 that inoculation of

*Presented before the Rocky Mountain Cancer Conference, Denver, July 23, 1959. The author is Director, National Cancer Institute, National Institutes of Health, Public Health Service, Department of Health, Education, and Welfare, Bethesda, Maryland.

newborn mice with cell-free extracts obtained from mouse leukemia tissue resulted in leukemia within one or two years. Working with material obtained from Dr. Gross, Stewart and Eddy, of the National Institutes of Health, observed the appearance not of leukemia but of parotid tumors. When cell suspensions of this parotid tumor were carried in tissue culture, the tumor-producing ability of the material assumed an explosive character. Following injection of this material into mice, Drs. Stewart and Eddy observed 23 different types of primary tumor, including parotid-gland tumors and tumors of the thymus, adrenals, and mammary glands.

Subsequent work by Stewart and Eddy has shown that the agent, now known as the polyoma virus, has the remarkable ability to cross strain and species lines. It induces sarcomas and vascular tumors in hamsters and renal sarcomas and subcutaneous tumors in rats. The polyoma agent is known to be a single virus, and it is generally accepted that the material with which Dr. Gross was working contained two viruses, the leukemia virus and the parotid tumor virus, and that the activity of the latter was increased by tissue culture passage.

Now we are witnessing a tremendous surge of virus research activity. Several new animal-tumor viruses have been reported, notably the Friend leukemia agent and the Moloney leukemia virus. The work with these two virus-tumors deserves particular attention, because it is highly suggestive of the possible future application of virus research to the control of cancer.

Only a few months ago, Moloney at the National Cancer Institute isolated from sarcoma 37, one of the transplantable mouse tumors, a virus that produces lymphocytic leukemia in mice. The activity of the virus has been increased so that it now causes leukemia within 10 weeks in all mice injected on the first day of life. No disease other than leukemia has been produced, and the histologic appearance of involved tissue at autopsy is virtually identical to that seen in spontaneous mouse leukemia. Furthermore, the virus does not appear to be age or strain specific.

For a number of reasons this work is considered extremely important. First, the Moloney virus leukemia is potentially a useful screen for the evaluation of candidate anticancer drugs. It has the advantage of uniform and rapid growth in several mouse strains; but perhaps more important, it is a host tumor, arising from the animal's own tissue. This might overcome one objection to existing mouse tumor screens; namely, that they utilize transplanted tumors growing in foreign hosts. In addition, the Moloney virus leukemia may provide a standardized model for the study of other virus-induced tumors.

Dr. Friend's research at Sloan-Kettering Institute for Cancer Research exemplifies another tack in the study of viruses and cancer. This investigator reported recently the development of a formalin-killed vaccine that is 80 per cent effective in preventing the development of leukemia in mice challenged with live virus. More recently, Stewart and Eddy accomplished essentially the same result with an immunizing material prepared from the polyoma virus. Thus, we see two broad pathways of virus-cancer research, either or both of which may be of tremendous importance to the control of human cancer.

Naturally, the vast increase of knowledge about viruses and animal cancer has spurred many scientists to theorize and investigate the possibility that some human malignancies have a viral origin. This, as you know, has never been shown scientifically. But, if research does prove that viruses are etiologically associated with human cancer, it may be possible to prevent such tumors by the use of vaccines or treat them with specifically designed chemotherapeutic agents.

Research grants

The National Cancer Institute has initiated a long-range program of research in the area of viruses and human cancer. Within the past few months, 26 new research grants valued at $1,250,000 have been awarded to aid virus studies. Support for some of the grantees has been recommended for periods up to 10 years and could total more than $10,000,000 to be financed out of the institute's annual appropriations. Among the leading virologists receiving grants is Charles Oberling, the eminent French scientist who

long has championed research on the virus-cancer relationship. Other virus-research grantees include Dr. Albert Sabin, one of the leaders in poliomyelitis research, and Dr. Joseph Beard, a pioneer investigator in tumor-virus studies.

Cancer chemotherapy

Chemotherapy research is one of the most active and promising paths in the scientific quest for the control of cancer. Research to develop drugs for the treatment and cure of cancer is advancing to the laboratory and the clinic. Within the past 15 years, some 20 drugs have been produced that temporarily benefit patients with various forms of malignant disease. The search for better drugs and more effective ways of using existing drugs has produced some of the most dramatic results yet achieved in cancer research. Let me describe some of this work.

One of the recently developed anticancer drugs is 5-flourouracil (5-FU), a member of a new class of antimetabolites known as fluorinated pyrimidines. Antimetabolites are believed to attack malignant cells by interfering with the biosynthesis of nucleic acid, an essential cell component. Reports from several clinical studies in which 5-FU has been used to treat a total of 350 patients with a variety of solid tumors are indeed encouraging. Objective remissions were observed in patients with cancer of the breast, colon and rectum, cervix, ovary, and liver. On the other hand, malignant melanoma and tumors of the lung, stomach, and pancreas were not affected by this compound.

5-FU, like many effective anticancer drugs, is highly toxic; and, in an attempt to reduce toxicity of the drug, a derivative, 5-flouro-2′-deoxyuridine (5-FUDR), was synthesized. Preliminary results indicate that patients tolerate about twice as much of the derivative; however, it is still too early to judge whether it is a more useful anticancer drug than 5-FU.

The success in recent years in treating some forms of malignant disease with chemicals—steroids, alkylating agents, antimetabolites—lends support to the theory that perhaps a drug, or several drugs, might be developed that will cure cancer. To implement and accelerate the search for such drugs, the federal government, independent research centers, colleges and universities, and private industry have pooled their resources and talents in a national, cooperative effort. Under this program candidate drugs are screened against mouse tumors at the rate of 40,000 a year. The small fraction that show promise are studied further and ultimately evaluated in the clinic. At present, about 100 drugs are being investigated in more than 150 hospitals across the country. Some 20 of these are established anticancer agents against which newer drugs are being evaluated.

An important complement to such empirical chemotherapy investigation is the planned synthesis of derivatives of effective or promising agents. The development and testing of 5-fluoro-2′-deoxyuridine, mentioned earlier, is an example of this type of chemotherapy research. Another is the work with a new compound related to the well-known antileukemia drug, methotrexate. Goldin and his colleagues at the National Cancer Institute found that methotrexate was the most effective of a group of 38 drugs in prolonging the survival of mice with far advanced leukemia. Later, a number of derivatives of methotrexate were studied in the same screening procedure, and two of the drugs—3′, 5′-dichloroamethopterin and 3′-bromo-5′-chloroamethopterin—were three to four times as effective as methotrexate in extending the survival of leukemic mice. Some of the mice were still alive at the end of six months and presumably "cured." There is, of course, no guarantee that similar results will be obtained in clinical trials, now in progress, but we are at least provided a demonstration in animals of the possibility of controlling systemic leukemia with drugs.

Another new drug, one that appears to warrant intensive clinical study, is cytoxan, a German-made compound related to nitrogen mustard. Reports from Europe of impressive clinical experience with this drug led to its introduction into the national chemotherapy screening program. Results of the screening of cytoxan corroborated the information reported from Europe. In preliminary clinical studies, cytoxan produced regressions in tumors of the breast, uterus, ovary, and larynx, and reticulum-cell sarcoma of bone. In addi-

tion, regression of bone, lung, liver, and subcutaneous metastases were observed. Good subjective responses, particularly of bone pain, occurred in a number of patients. Plans are now being developed for the full-scale clinical evaluation of cytoxan as part of the national chemotherapy program.

It seems likely that one day chemotherapy will stand with surgery and radiation as a procedure for the cure of malignant diseases in man. Experience in the past decade or so seems to indicate that medical science will succeed in developing a number of lastingly effective anticancer drugs and in learning how to use them to the best possible advantage.

Cytology and diagnostic research

In our present state of knowledge of malignant disease, it is essential to diagnose cancer at the earliest possible moment, for delay almost invariably carries with it a lessened opportunity for effective treatment. Fully half of all cancers are accessible to direct examination during a routine physical check-up. Encouraging as this fact is, however, it must be remembered that many tumors so detected will already have progressed beyond the reach of curative therapy. What is needed to improve this picture is either a battery of tests, each of which will detect certain forms of cancer at a very early stage, or a general test for malignancy. Research to improve cancer diagnosis is pursuing both these objectives.

The cytologic test for uterine cancer certainly stands as one of the most important achievements in cancer detection and diagnosis. The test was developed by Papanicolaou and Traut and involves the microscopic examination of vaginal fluid. Scientists of the National Cancer Institute, in cooperation with the University of Tennessee and other local medical and health groups, studied the cytologic test in the adult female population of metropolitan Memphis.

Among 108,000 women examined in the first round of screening, about 800 cases of cancer were detected and later diagnosed microscopically. Half of these cases were of intraepithelial carcinoma, which has a high cure rate. Ninety per cent of these cases were unsuspected. The remaining 400 cancers were invasive to varying degrees, and of these, 30 per cent were unsuspected.

About a year later, 33,000 of the original group of women examined received a second cytologic test. In this group, another 83 cases of malignancy were discovered, of which 72 were intraepithelial and 11 invasive. In terms of rates per thousand, there was a slight decrease for intraepithelial cancer, from 3.6 detected on the first examination to 2.2 on the second examination. For invasive cancer, however, the drop was far more significant, from 3.4 on the first screening to 0.3 on the second. Thus, the rate for invasive cancer was on the second examination only one-tenth that on the first. Further analysis of the Memphis data showed moreover that invasive uterine cancer may remain asymptomatic for two to three years. However, the disease can be detected by cytologic examination during this symptom-free period.

Scientists at the National Cancer Institute and elsewhere are investigating the possibility of applying the cytologic examination to the detection of cancer of sites other than the uterus, such as the lung, large bowel, urinary bladder, prostate gland, and stomach. Results of one such study in which the cytologic test was applied to 1,561 patients with suspected gastrointestinal malignancies indicated that the test accurately detected 95 per cent of the suspected cancers of the esophagus, stomach, and colon, and 60 per cent of tumors of the pancreatic and biliary systems. If results of this kind can be obtained for other malignancies, cytology may prove to be an invaluable aid to the diagnosis of early cancers of many internal sites, thus permitting patients to receive prompt, adequate treatment.

Efforts to develop a generalized test for cancer historically have met with little or no success. Perhaps the principal obstacle here is the apparent lack of a measurable, qualitative difference between normal and malignant cells. However, the significant progress in producing remarkably precise instruments to measure chemical and biological materials may open up entirely new opportunities for cancer diagnosis. The National Cancer Institute within the past year initiated a program of research aimed at improving the status of cancer diagnostic methodology. Most of

the research will be carried out under contract in nonfederal laboratories. The objective is to develop one or more tests, such as blood or urine determinations, that will accurately indicate malignancy in asymptomatic persons. If this research yields the desired results, many more cancer patients could receive the priceless benefit of early, rather than late, treatment, and a substantial reduction in cancer mortality could ensue. This, of course, is the objective of cancer research and control activities.

Epidemiology

Because the goal of cancer research is reduction of the impact of malignant disease on the population, it is of primary importance to gauge the extent of cancer. Through epidemiologic research, scientists are able to recognize trends in cancer incidence and mortality, variations by age, race, sex, occupation, and observe progress in controlling cancer by the application of the product of research.

There have been two large-scale cancer epidemiology studies whose results are considered applicable to the United States at large. These are "Morbidity from Cancer in the United States," and "Cancer in Connecticut—1935-1951." In the first of these studies, cancer incidence data were collected twice, in 1937-1939 and 1947-1948, in 10 metropolitan areas selected to represent different geographic regions. In the Connecticut study, data were gathered over three five-year periods on all known cancer cases in the state. Incidence, diagnosis, treatment, and survival data were recorded on approximately 75,000 cancer patients. Both of these studies have proven to be of inestimable value in appraising the magnitude of the cancer problem and the accomplishments of cancer control activities.

Analysis of the Connecticut experience reveals a changing pattern of cancer survival. The five-year survival rates for males increased from 19 per cent in the period 1935-1940 to 25 per cent in 1947-1951. The corresponding increase for females was from 29 to 38 per cent. Among the cancer sites for which the greatest increase in survival were observed were large intestine in both men and women, rectum in men, and uterus in women. The investigators who compiled and analyzed these data concluded that the increases in survival of cancer patients resulted from improvement in treatment rather than in diagnosis. However, the most important and heartening fact learned from this study was that in 20 years the proportion of cancer patients surviving five years after diagnosis rose from one in four to one in three.

The above epidemiologic data show that both the magnitude of the cancer problem and the ability of medical science to cope with this problem are increasing. Beyond this, however, epidemiologic research has pinpointed some specific areas where intensive research would seem to be of the utmost importance. One of these, of course, is the implication of smoking as a cause of lung cancer. Statistical research, supported by laboratory findings, has demonstrated that excessive cigarette smoking can be a cause of pulmonary carcinoma and that the greater the consumption of cigarettes, the greater risk to lung cancer. Research workers are attempting to identify the carcinogenic agent or agents in tobacco smoke and to develop methods of removing them.

Another environmental factor that appears to be associated with the etiology of lung cancer is air pollution. Epidemiologic research has shown that pulmonary carcinoma occurs at a higher rate among urban residents than among rural residents. Laboratory studies, moreover, have shown that polluted air contains a number of potent carcinogens for animals, and it has been suggested that perhaps polluted air may be cocarcinogenic with tobacco smoke. This research problem is particularly important in view of the alarming increase in the incidence of lung cancer among men and women.

Epidemiologic and laboratory data also have clearly demonstrated the carcinogenic properties of ionizing radiations from x-rays, radioactive substances, and sunlight. Now, the importance of radioactive fallout from atomic explosions and the extent to which this poses a cancer hazard need to be clarified by systematic research.

It is recognized that both known and unknown factors in the environment may contribute to the causation of malignant disease. To gather information on this subject, the

National Cancer Institute has established, at nearby Hagerstown, Maryland, a long-term epidemiologic study of the influence of environmental factors on the cancer attack rate. The Hagerstown community was selected for this research for several reasons: first, the population is remarkably stable and has been so for many years; second, complete medical records dating from the latter part of the 19th century are available; third, the geography of the area is sufficiently varied to provide a broad topographic spectrum.

Essentially the Hagerstown study will involve two separate but related surveys. Cancer epidemiologic data will be collected for the entire community and at the same time, samples of soil, air, water, rock, vegetation, building materials, etc., will be gathered and compared with the data on cancer incidence and mortality. From this we hope to reveal any patterns or correlations between normal environment and the occurrence of malignant disease.

Conclusion

We have entered a new era in cancer research and control, an era that perhaps can be characterized by the union of many scientific disciplines in the search for understanding of a basic mystery of life, the nature of normal and abnormal growth. Established scientific paths, such as biology, chemistry, and physiology, are dividing and again merging into new highways of research: virus oncology, radiobiology, chemotherapeutics. Perhaps these, too, will combine into a new order of thinking that is yet beyond our imagination.

The resources with which to solve the problem of cancer are within our grasp. Aided by them, research scientists are amassing the knowledge that will make possible the eradication of malignant disease as a threat to mankind. This is our goal, and I confidently believe that medical science is making impressive progress toward its achievement. •

Control of anxiety, tension and motor excitability

Use of a dual action psychotropic agent

John H. Grosjean, M.D., Lakewood, Colorado

Favorable evaluation of Prozine in a series of 30 patients.

THE HYPOTHESIS HAS BEEN PROPOSED that the combination of meprobamate, which acts on the thalamic area of the brain[1], and promazine hydrochloride, which acts on the hypothalamic[2] and reticular areas, has a more specific effect in controlling anxiety, tension, and motor excitability than either drug alone[3]. This over-all effect has been reported to occur without the production of side reactions which might interfere with psychotherapeutic treatment[4]. In order to prove or disprove this hypothesis, the combined medication was prescribed as a part of the treatment for 30 psychiatric patients randomly selected from private practice.

Procedure

The 30 patients included in this study had typical problems associated with abnormal reactivity to their environment or were suffering from a true psychotic illness.

TABLE 1
Diagnoses

Diagnosis	Case numbers	Total
Addiction		
Narcotic	7, 18	2
Brain Syndrome		
Acute and Chronic	20, 23	2
Psychoses		
Involutional		
Paranoid	3, 9	2
Depression	21, 27	2
Manic-depressive	16, 22, 24	3
Schizophrenia		
Schizo-affective	2, 8, 17, 29	4
Neuroses		
Anxiety		
With phobic reaction	5, 26	2
Without phobic reaction	10, 19, 25, 30	4
Dissociative reaction	6	1
Neurotic depression	15	1
Reactive depression	1, 4, 11, 12, 13, 14, 28	7
		30

The diagnoses made for these patients are presented in Table 1. Some of the patients were hospitalized; others were seen on an out-patient basis or at the office. The ages of the patients ranged from 25 to 70 years. The dose of the meprobamate-promazine hydrochloride combination administered varied from two to four capsules daily, depending on the condition and the requirements of the individual patient. Each capsule* contained 200 mg. of meprobamate and 25 mg. of promazine hydrochloride.

Supportive therapy was given to all patients when indicated; psychotherapy, electrotherapy (electrostimulation treatments of the Medcraft type). Standard treatments for underlying organic diseases, when present, were maintained; for example, antihypertensive agents. In a few instances, when the response was inadequate, more potent antihallucinatory or antidepressant drugs were administered concurrently, until the symptoms were adequately controlled and maintenance was possible on Prozine® capsules.

*Prozine® capsules (meprobamate and promazine hydrochloride) (Equanil and Sparine) manufactured by Wyeth Laboratories, Inc., Philadelphia, Pa.

Results and discussion

The results were satisfactory in all 30 patients. No side reactions occurred. Prozine was especially helpful in reducing anxiety and tension as well as in modifying the abnormal pattern of behavior in these patients. Interpersonal relationships with the patient were enhanced, making the patients more amenable to psychotherapy. It was noted that indifference which was so frequently seen with the use of a single psychotropic agent was absent in these patients. In fact, the patients appeared to be motivated to continue therapy and were anxious to seek help in solving their problems. This obvious reduction of emotional turmoil and anxiety made it possible to institute psychotherapy without interference, earlier and with more effect than had previously been experienced. The combined medication was found to be compatible with other psychopharmaceutical agents, such as azacyclonol hydrochloride, imipramine hydrochloride, Ritonic®, and Rauwolfia preparations, used in treating a few of the patients who required additional supportive therapy.

The points brought out in this short discussion can best be illustrated by the following five short cases which are representative of the 30 cases treated.

CASE REPORTS

Case 1: A white man, 44 years of age, moderately hypertensive and obese. Symptoms: Anxiety, tension, intermittent depression (usually without agitation), and symptomatic alcoholism. Diagnosis: Depressive reaction with basic cyclothymic personality features. Treatment: Hospitalized three times for withdrawal from alcohol. On third occasion, given four capsules of Prozine daily. On discharge was maintained on four Prozine capsules daily, the number gradually being decreased. Supplemental medication included vitamin B-12 injections and Rauwolfia preparations. Results: Made it possible to maintain his emotional equilibrium without diminishing his motor activity so that depressive reactions were no longer a problem.

Case 2: A married white woman, aged 25, in sixth week of pregnancy. Symptoms: Impulsive irritability directed toward young boy. Intensive physical discipline in wake of temper outburst. Remorseful, anxious, withdrawn, and depressed. Loss of interest in upkeep of home and children. Volatile verbal outbursts directed at husband. Tempered feeling by drinking in secret. Diagnosis: Schizo-affective reaction with basic character neurotic traits. Treatment: Patient hospitalized and given from three to four Prozine capsules daily, azacyclonol hydrochloride, and 12 electrostimulation treatments (Medcraft type). Results: On discharge from hospital and for several months thereafter, patient became more amenable to suggestion and showed more insight and understanding on maintenance dose of three to four capsules of Prozine daily (after meals and at bedtime). Impulsive loss of control, irritability, and rapid changes in mood diminished. No further electrotherapy necessary.

Case 3: A married white woman, 60 years of age. Symptoms: Varied somatic problems, intermittent tension, insomnia, anorexia, weight loss, and intermittent agitation. Affect inappropriate with dissociation, and definite emotional blunting. Vague, rambling, irrelevant with definite paranoid trends, disorganization, and weakening of intellectual defenses. Diagnosis: Involutional paranoid reaction. Treatment: Patient hospitalized and given three to four Prozine capsules daily, vitamins, azacyclonol hydrochloride, and nine electrostimulation treatments. Results: Postelectrotherapy confusion maintained at a minimum. For several months since discharge from hospital, patient showed increased spontaneity, has overcome somatic symptoms of withdrawal, and has taken an active interest in surroundings, including active participation in church group work. These results are considered most gratifying, especially as this patient has definite paranoid trends.

Case 4: A white unmarried woman, 36 years of age, had previously received prolonged treatment for emotional illness. Symptoms: Passive aggression, withdrawal, and impulsive tendencies. Patient was resistant to psychotherapy (tense and withdrawn). Diagnosis: Psychoneurosis. Treatment: Prozine, one capsule four times daily. Results: The response increased availability to psychotherapy and so improved this patient that medication is no longer required.

Case 5: A white man, aged 47, was originally referred because of the combined use of alcohol and sedative agents. Symptoms: Phobic manifestations, underlying anxiety, marked depression, and tension. Diagnosis: Phobic reaction and alcoholism. Treatment: Patient hospitalized and given Prozine, one capsule four times daily, and supplementary vitamin medication. Results: Patient improved rapidly and has been followed on an outpatient basis. Prozine appears to have motivated him in a situation in which patients fail to respond. The patient states that his tensions have been markedly reduced since using the medication.

Conclusion

The success achieved with the use of the meprobamate-promazine hydrochloride combination indicates not only that this agent is specifically effective, but that it is generally applicable in mental and emotional disturbances with widely variable characteristics. It is valuable not only in psychotic and neurotic illnesses, but also in basic character disturbances, many of which are refractory to most forms of therapy. In the latter, the combination appears to make the patient more amenable to the psychotherapeutic approach and exerts a favorable influence on the motivation of the individual to continue therapy. In addition, the combination is compatible with other agents used in treating the patient and, thereby, broadens its spectrum of utilization. •

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Our greatest problem*

John L. McDonald, M.D., Colorado Springs

"Town and Gown" disputes may stem from our failure to understand changes in medical education made necessary by modern scientific advances: a provocative address by the outgoing President of the Colorado State Medical Society.

LET US CONSIDER OUR MOST SERIOUS internal problem—medical education.

In 1847 the American Medical Association was founded and the first meeting was held in Baltimore in 1848. The primary objective of this new organization was elevation of standards in medical education. Let it be said with pride that we have never neglected that objective. If medical education in this country is the greatest in the world, and we believe it is, the credit is largely due to the wisdom of our predecessors and we hope partly to ourselves. There is, however, one danger which is inherent in any reforming organization. There may come a time when, great things having been achieved, an organization tends to become satisfied with the status quo, forgetting that perfection of any social organization is never achieved.

Problem in liaison

Any one of us in the practice of our profession is of limited value to society as a whole. Each of us sees a certain number of patients who are in need of our help in alleviating or curing illnesses. We see certain patients who are in need of reassurance. Increasingly we are able to anticipate and to prevent potential illnesses. The institution which is of *paramount* importance is the one whose object is the *teaching* of medicine so that hundreds and scores of hundreds of trained individuals, physicians and ancillary workers are suitably prepared to do the greatest good for the greatest number of people.

That there now exists a problem in liaison between the full time faculty of the University of Colorado Medical School and some members of our Colorado State Medical Society there is no doubt. That it involves primarily a disagreement in ideas between the full-time medical school faculty and the so-called voluntary or part-time faculty is also obvious. I have heard and read that this is a problem primarily of interest to the Medical School faculty and to the voluntary faculty, and even that it is a problem which should be settled between the Medical School faculty and the *alumni* of the Medical School. That is not correct. This is a state problem. It is the concern of every citizen of the state and of every medical practitioner in Colorado now and in the future.

Potential deterioration

I do not intend to go into the relations between the Medical School and the Denver General Hospital with the consequent unfortunate loss of teaching material to the Medical School, the inevitable harmful publicity and, I think, the potential deterioration of health care in the city of Denver. That is past history and the city of Denver has a perfect right to do what it has chosen to do. I merely point out that I believe that part

*Delivered September 14, 1960, before the House of Delegates of the Colorado State Medical Society, 90th Annual Session, Estes Park, just before Dr. McDonald retired from that Society's presidency.

of the reason for this dispute can be attributed to the poor relationship between the faculty and some members of the State Society.

This type of problem is not unique to Colorado. It exists in many other sections of the country. Nor is it, in Colorado, entirely of recent origin. I have been assured that very early in the history of this Medical School, that is, soon after the union of the various schools which went to comprise the present University of Colorado Medical School, there were conflicts approaching the "town and gown" misunderstanding. There is no question, however, but that the dislocation has been much greater as the school has progressed farther in the direction of full-time clinical teaching.

Nonspecific criticism

What are the reasons, the real reasons, behind this lamentable discord? When I first began to sit in this House of Delegates and to be aware of the discord I was startled and completely unable to understand it. As time went on and as I saw the Medical School improving and discord increasing I was still unable to understand it or to gain any enlightenment whatsoever concerning the underlying causes. Two years ago when I first became a member of the Board of Trustees of this Society I thought that I would then surely learn some facts of which I was previously unaware. Even after repeated questioning of other members of the Board of Trustees, our Society's national delegates, and other physicians, including some who are on the part-time faculty, I have not succeeded in getting a satisfactory answer. Reasons given have been, I think, rambling and vague, interspersed at times with totally unwarranted reflections on individuals, their traits and upon the type of school from which they have come. Nonspecific criticism of the "Harvard type of faculty," of dictatorial desire on the part of various members of the full-time faculty to dominate their departments without consulting the voluntary staff and other criticisms of this general type have, I feel, been far from well documented. Of course, in any group, there are variations in character and there may be individuals in the full-time faculty who are not completely ethical, honest and cooperative. That does not warrant a blanket indictment of the whole faculty and its mode of teaching.

At this point it is necessary to consider also the criticism frequently made that Colorado is attempting to copy a certain type of medical school. We are told that Colorado University is not suited to have an "endowed school" type of program. It is said that we do not have the endowment to hire a full-time faculty of sufficient merit. The idea that some schools have a different type of student benefiting by another type of curriculum than that which we should offer to our presumably less able students from Colorado is ridiculous. If the so-called "Ivy League" training is now better able, in Boston, to train a physician who will practice in a small community in New Hampshire, then why is it not equally valid in the University of Colorado to train such a practitioner who will live in one of our smaller cities? There are not two types of practitioners. There is no such thing as a doctor who is trained for research alone. All doctors are trained in the practice of medicine but some have a predeliction for research, a more nagging intellectual curiosity, a greater stimulus to teach. This has been well expressed by the writer of one of the letters which I will mention, when he said, "At their best, teaching, research and patient care form an indivisible triad."

School ranks high

I would like to mention here a somewhat irrelevant point which has to be considered at some time. These full-time faculty members are entitled to a decent income, something commensurate with their abilities and approaching, if not equaling, that of men in private practice. The idea that a teacher should receive his reward entirely from the joys of teaching is insulting and unrealistic.

As a further aside I would like to know what is the origin of this "Ivy League" designation of a type of *medical* school? Is it in any way related to the appalling popularity of the cult of mediocrity which is at present well illustrated by the taunting accusation made to or about any intellectual person: that he is an "egg-head"? Since when is timid conformation superior to intellectual curi-

osity? Remember the statement on the masthead of the Denver Post which I think is quite apt: "There is no hope for the satisfied man."

Having failed to be enlightened by what I had learned by my own observation and questioning, I wrote to the deans of various medical schools in this country and to several representatives of organizations devoted to the study of medical teaching. I promised that their replies would be held as confidential. I deliberately addressed no request to anyone whom I knew to have had previous connection with the Colorado school. I had replies from three individuals who represent important organizations devoted to the study of medical teaching and from the deans of nine medical schools. Five of these medical schools are endowed schools. Of these, one is an eastern school, two are in the middle west, and two in the far west and southwest. In addition, I have replies from the deans of four state institutions. The calibre of these men is such that I do not feel a single one of them would bother to make routine complimentary remarks concerning our school. Furthermore, remember that they were assured that their remarks would be treated as individually confidential. Without exception these men were most enthusiastic about the advances made in recent years in the teaching of medicine at the University of Colorado. At least one individual stated that Colorado was at or near the top in state supported schools over the nation. Another individual rated Colorado with three other state schools as one of the four best. They all regarded our faculty as able, progressive, and distinguished. Many of them specifically named individuals of the staff here as men of great stature, some of them the best or among the best in their fields in the country.

Teaching trends justified

Virtually all of these men stressed the necessity of employing full-time faculty men, the importance of research programs and the necessity of changing the curricula, from those in which didactic lectures and inflexible programs were the rule to current methods which have been so much deplored by some of our members. I wish time permitted me to read some portions of each of these letters in which arguments for this type of education were clearly and logically presented, but it does not.

The most important and informative document on a modern medical school which I have found is readily available to all of you. This bulletin is titled "Functions and Structure of a Modern Medical School." It consists of a statement prepared through collaboration with the Council on Medical Education and Hospitals of the American Medical Association and the Association of American Medical Colleges. It was approved by the House of Delegates of the American Medical Association in June of 1957. This document should be in the hands of each individual in the State Society who is interested in medical teaching. It is well worth intense study. Casual reading alone is not sufficient but I am going to take the liberty now of reading a few quotations directly from it. I think this bulletin clearly justifies the teaching trends in our Medical School and it is obvious that the medical educators to whom I applied for information are endeavoring to operate their schools in this very fashion.*

There are many statements and arguments made by members of the voluntary faculty which I have not made any attempt to list or discuss, though I have been conscious of most of them. These are problems which should be taken up dispassionately in meetings of the full faculty of the Colorado Medical School or committees thereof.

There are, of course, reasons for the lack of complete understanding between full-time teachers of medicine and other members of the profession but none of my correspondents pretended to understand thoroughly why they exist. A few of them believed that the fear of financial competition is an important factor. In this community it seems obvious that the financial competition furnished by a full-time faculty allowed to do consultation work or to have some private patients is minute considering the total amount spent on doctors' fees. Nevertheless, this cannot be discarded entirely.

Some men felt that there was a factor of jealousy because of the certain amount of

*At this point Dr. McDonald read pertinent paragraphs from "Functions and Structure of a Modern Medical School."

prestige which goes with the full-time faculty appointment and title. This probably is of some importance. It does, however, seem somewhat petty. It is obvious that it is impossible to conduct a full-time medical practice and at the same time devote the time to teaching, organization and research essential in the heads of clinical departments. Many of the men in private practice here who are concerned with this lack of prestige are quite capable of, and have the endowments for, full-time teaching if they so desire. They must choose one or the other.

Most of the men who wrote me believe that a matter of misunderstanding was most important. They referred to a misunderstanding of the extraordinary but essential changes in medical curricula throughout the country at this time. Where would our nuclear physicists or synthetic chemists come from if they were exposed to an inflexible and archaic teaching formula?

Here again a study of "Functions and Structure of a Modern Medical School" might help. In connection with this misunderstanding several of the correspondents proposed more dispassionate discussion of the problem between various faculty groups. They felt that it should be possible for reasonable men to get together to talk these things out. Unfortunately, so long as the attitude is that of "mine and thine," "my rights and your rights," no discussions are likely to be beneficial. Both the full-time faculty and the part-time faculty will have to demonstrate a desire to compose their differences, not to aggravate them. The structure for such meetings already exists and I sincerely hope it may be utilized.

Liberality of ideas

I believe that there is a large ideological factor involved. The so-called "town and gown" conflict has always been to a certain extent ideological. It is unfortunately true that people in academic life are distrusted by nonteaching members of society. It is easy to say in effect that this is a product of our "time of troubles" in a world which is practically divided between believers in our concepts of freedom of thought and action and those of whom we feel the very reverse is true. Frequently teachers in our current civilization are accused of such a liberality of ideas that they are thought to be subversive. It has been repeatedly stated that the present faculty does indeed indoctrinate our young students. This I do not believe. I've talked to these students as have you. They have not been indoctrinated with false ideas. Who can be more liberal than the college sophomore first studying economics, no matter what the beliefs of his teacher? Young medical students are idealistic. They are encountering suffering and disease for the first time. They have, at this stage in their education, ideas which will subtly and gradually undergo changes in the direction of conservatism.

That this distrust of the teacher is not modern but is as ancient as civilization can be shown by one illustration alone. In the fourth century before Christ, Socrates was executed, not primarily for being a traitor to the state but for indoctrinating the youth of the state by "subversive" teaching. Socrates was the full-time teacher (and we know Xanthippe frequently called attention to his inadequate income). Interestingly enough, Athens at that time, following the Peloponnesian wars, was having its "time of troubles" just as we do at the present. If there is any possibility that there is an ideological basis for our disagreements, I hope that we may be big enough to recognize it and to relegate it to its proper level of unimportance. It is an unworthy motive.

Colorado General expansion

You will remember that in 1959 the Colorado State Medical Society accorded the plan for a new hospital at the Colorado General our full support. The present facilities of the University of Colorado Medical School were built in 1924 for a class of 50 students; now there are 85 men in each class. It was built for a full-time faculty of 25 and for 75 volunteers. There are now 150 full-time men and over 500 volunteers. It was not built to accommodate any kind of research. There is now a very large research program. There were essentially no residents when the program started and now there are about 70 residents and many graduate students. There are altogether over 1,000 students in the Medical School including undergraduates, interns,

residents, candidates for the degree of Ph.D., laboratory and x-ray technologists, and physiotherapists. The out-patient department was built to accommodate 25,000 patient visits a year; it is now seeing 140,000 a year. The new hospital proposes 425 beds so that it will be possible ultimately to expand the medical classes to 96. It is planned that there will be ample facilities for research, a necessity in the development of a modern medical school. Incidentally, the use of this facility will not be limited to men on the full-time faculty. By Board of Regents policy it may be utilized by any member of the volunteer faculty for his own patients.

Strong endorsement

If the statement is made that this teaching facility will not be for the care of indigents alone, remember that in this country, fortunately for the welfare of all, medical indigency is diminishing and we trust will soon disappear. I hope that there will never be any attempt by this Society to withdraw the strong endorsement which it previously accorded this plan.

Continued recognition

Finally, I ask for your continued recognition of this splendid school of ours. I would like to ask that this House of Delegates recognize the necessity of change in the methods of teaching, realizing that, of all evils that can occur in an institution, that of standing still is the worst. Let us be proud that our institution, by virtue of its splendid modern program grafted on an equally fine background, is so well regarded throughout the nation and is so well equipped to supply Colorado with the highest type of medical practitioner. That is the greatest praise I can bestow. •

Huntington's chorea*

Differentiated from Wilson's disease with report of unusual case

David S. Dow, M.D., Denver

Case presentation of a patient with onset of disease at age 13, and with absence of choreiform movements. Discussion with reference to hepatolenticular degeneration.

THE CASE HISTORY OF A GIRL, aged 26 years, with the onset of an apparently hereditary spastic neuromuscular disorder at the age of 13, will be discussed, presenting her clinical course, therapeutic measures, possible diagnoses, and investigative studies carried out in efforts to establish a diagnosis.

CASE REPORT

Present illness: D. O., a single, white female, aged 19 years, was first admitted to the Colorado General Hospital late in 1951 with a chief complaint of progressive tremor, present since age 13. Her difficulty was first noticed to be a mild tremor involving the neck muscles, giving a mild shaking tremorous motion to her head, this tremor being accentuated when the patient became excited. Over the succeeding years, the tremor had gradually progressed to involve the patient's limbs, so that three years prior to admission she had been forced to drop out of school. History of two mild convulsive seizures during the six months prior to admission was also obtained. Review of systems disclosed some difficulty with urinary hesitancy. Past medical history included only the childhood diseases of mumps, chicken pox and tonsillitis.

*Presented at the annual Colorado Intern-Resident Clinics, May 21, 1959; recipient of George B. Kent award for the most meritorious paper by a Colorado intern. A reference list of 27 items is excluded because of space limitations.

There were no episodes of meningitis or encephalitis.

Family history was significant in that the patient's father, uncle, and paternal grandmother were said to have been afflicted with a form of neuromuscular disorder. (Subsequent investigation has revealed involvement of the preceding three generations of this family with varying forms of a neuromuscular disorder.)

Physical examination on this first admission revealed a marked generalized tremor of approximately two to four movements per second. The nature of the tremor was described as oscillatory and not choreiform. "Waxing and waning rigidity of arms" was noted, along with the presence of frequent blinking, mouth breathing, and a rather constant smiling expression. Her gait was ataxic, and reflexes were hyperactive throughout. The impressions on this admission were listed as Huntington's chorea, hepatolenticular degeneration, and Westphal's pseudosclerosis.

Clinical course: During this first hospitalization she was treated with British anti-lewisite (BAL) on the basis of presumptive evidence that she was suffering from hepatolenticular degeneration. Urinary copper levels were obtained prior to and during therapy with BAL. These were approximately normal prior to therapy, and increased from six to 10-fold during the five days of therapy (Fig. 1). There was some improvement in subjective feeling noted during the five days of hospitalization, and some lessening of tremor was noted, although it was felt that this might have been secondary to the enforced period of bed rest. Liver function studies carried out during this hospitalization were entirely normal.

She was discharged to be followed as an outpatient, where she was treated with Artane without improvement, given one course of BAL as an outpatient, and admitted four times during the next eight months for therapy with BAL. Mental

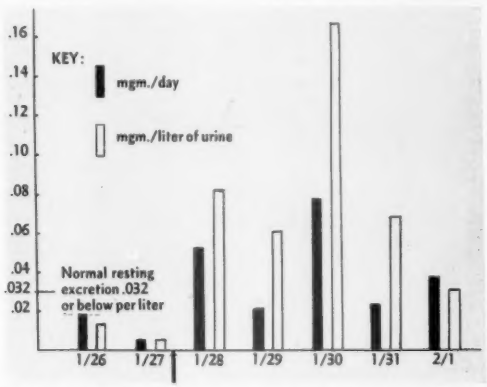

Fig. 1. Urinary copper excretion in patient D. O., before and during therapy with BAL. Arrow indicates institution of BAL, given intramuscularly 175 mgm. t.i.d. BAL was reduced to 120 mgm. t.i.d. on Jan. 29, and was discontinued on Feb. 1.

changes of a mild degree were first recorded late in 1952, in that she was having frequent temper tantrums directed against her two older siblings. However, her memory was said to be still functioning normally.

Succeeding attempts at BAL therapy were increasingly complicated by the development of an allergic sensitivity reaction to the oil suspension of BAL, to the degree that by early 1954, no further treatments were given. It was recorded at that time that the patient seemed to feel subjectively better after each course of BAL, looking forward to them eagerly. However, there was no demonstrable change in symptomatology as observed by the attending physicians.

The patient was not followed for a period of two years, from early 1954 to early 1956. By early 1956 she was no longer able to feed herself, and was having occasional "black-out spells." She was placed on Dilantin at this time, and physical therapy was instituted, with some improvement in her spasticity. By late 1956, she was noted to be extremely euphoric, no longer able to walk by herself, and having a great deal of difficulty with eating, choking frequently on both liquid and solid foods. Repeat liver function studies at this time were again entirely normal.

She was hospitalized in June, 1957, for an upper respiratory infection, and tracheostomy was carried out for facilitation of removal of excessive bronchial secretions, since the patient had little respiratory reserve or cough reflex. Upon recovery from the respiratory infection, the tracheostomy was closed off without difficulty, and the patient remained in the hospital for the following 576 days, primarily as a nursing care patient, with daily physical therapy, but otherwise bedridden. One course of versene therapy was attempted, without any notable improvement in the patient, and multiple biochemical studies were carried out in attempts to establish and confirm a diagnosis on this girl. Her course was complicated only by occasional urinary tract infections, which were treated with sulfonamides, and a slowly progressive downhill course.

She was finally discharged to a nursing home in April, 1959, but re-entered the hospital 10 days later with a severe urinary tract infection and dehydration. She has not responded well to therapy, and is approaching a terminal state.

Case summary

In summary, this is a 26-year-old white female with the onset of mild tremor at age 13, progressing to a generalized spasticity and rigidity, to the extent that she had marked difficulty with speech by age 20, was unable to feed herself by age 23, unable to walk at 24, and virtually incapacitated by age 26. Mental changes included marked euphoria, but without any degree of dementia; during

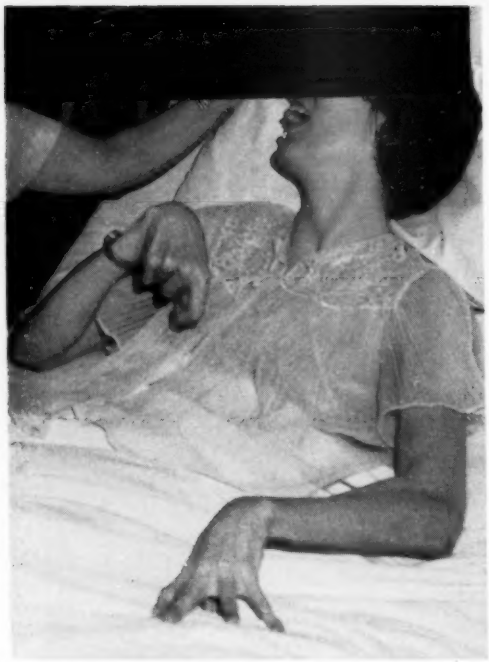

Fig. 2. Patient D. O., aged 26, after 13 years of symptoms of an atypical form of Huntington's chorea. Note flexion contractures of hands and arms, vacant smiling facial expression.

her recent 22-month hospitalization her entire day was usually spent in watching television while lying in bed. Her muscular status is now that of marked rigidity and contracture, with very little tremor. The accompanying illustration demonstrates her rather fixed smile, and constant wrist flexion and arm, hand, and finger spasticity (Fig. 2).

Throughout most of her last hospital admission, the clinical diagnosis on this patient was listed as hepatolenticular degeneration. However, many of the staff, including this author, were not convinced that this was indeed the correct diagnosis. Thus the purpose of this paper is to attempt to outline and summarize the possibilities for this or another diagnosis.

Wilson's disease

Hepatolenticular degeneration, or Wilson's disease, sometimes termed progressive lenticular degeneration, was first described by S. Kinnier Wilson in 1912, in a report on six previously described cases, adding four of his own, with nervous symptoms accompanied by cirrhosis of the liver. An excellent summary of the history of the concept of hepatolenticular degeneration is given in Wilson's text Neurology, which also gives a complete description of the clinical picture in this condition.

Also discussed in conjunction with Wilson's disease in most texts is an entity originally described in the late 19th century by Westphal and Strumphel, a neuromuscular disorder with symptoms similar to the later descriptions of Wilson's disease, and termed Westphal's pseudosclerosis. However, most modern texts now classify this as a minor variant of, or even synonymous with, hepatolenticular degeneration, there being no good basis on which to differentiate the characteristic degenerative spastic course described under both of these entities.

The case presented herein contains a striking number of clinical symptoms which would fit well with Wilson's disease. The age and nature of onset is characteristic of hepatolenticular degeneration, as are the flexion contractures of the patient's hands and arms, the difficulty with purposeful movements being interfered with by tremor, accentuation of tremor with excitement and lessening with sleep, and the characteristic mouth-open stereotyped smile of the patient in the advanced stage. These are all demonstrated in this patient, as are also hypertonia, dysarthria, euphoria, and a history of epileptiform seizures, all of which are often mentioned in classical descriptions of hepatolenticular degeneration. The lack of any severe mental disturbance in this patient is also not unlike patients with Wilson's disease.

Liver involvement

Hepatic involvement is, to date, entirely non-demonstrable in this patient, despite several repetitions of numerous liver function tests, the most recent ones having been BSP excretion and prothrombin time evaluation, which were both normal at the time of writing of this article. Wilson states that "without this liver disease, seldom if ever disclosed during life—unless by one or another functional test—no case can be admitted to the category." Note, however, that it is stated in this text and elsewhere that outward, or clinical, signs of cirrhosis are rarely demon-

strated antemortem (i.e., hepatomegaly, bleeding tendency, jaundice, or evidence of portal hypertension). Occasionally a history of jaundice prior to the onset of neurological symptoms will be elicited, and in some juvenile forms of the disease, the severe hepatic involvement will be the first and most serious manifestation of Wilson's disease. But in many of the more chronic cases of Wilson's disease, liver function studies, which are even more sensitive than the physical signs, may be entirely normal. Thus the absence of abnormal liver function studies in this patient is not necessarily to the exclusion of Wilson's disease.

The presence of a greenish-brown pigmentation ring of the cornea, known as the Kayser-Fleischer ring, was described in this entity as far back as 1902, and in the opinion of some, is a fairly constant finding in this disease, quoted as high as 90 per cent by Bearn. Others do not feel it is this constant (e.g., Cartwright, quoting it as present in 50 per cent of cases), but certainly that it is a frequent, and when present, diagnostic feature. The patient presented herein has been subjected to three careful ophthalmological examinations, including slit lamp exam, over the past seven years, with no evidence of Kayser-Fleischer rings having been found at any time.

Copper metabolism

The basic defect in hepatolenticular degeneration has long been a question, but recently it has been accepted that there is invariably a disturbance of copper metabolism. The level of copper in affected tissues, particularly the liver and basal ganglia of the cerebrum, is characteristically elevated in this condition, and conversely there is a marked decrease in the alpha-globulin in the serum which normally binds serum copper, this globulin being termed ceruloplasmin. This ceruloplasmin in turn normally demonstrates a certain degree of copper oxidase activity, thus when deficient, as in Wilson's disease, the copper oxidase activity is markedly diminished. It is interesting to note, however, the recent report of a series of four cases of jaundice in children which were proved by tissue analysis to be cases of Wilsons' disease, with elevated tissue copper content, in which ante-mortem studies revealed normal ceruloplasmin levels in two cases. These two cases did demonstrate Kayser-Fleischer rings and aminoaciduria, however, and no neurologic symptoms.

Mention of aminoaciduria in the above reference brings up another recently discovered abnormality frequently accompanying Wilson's disease, that of a markedly increased urinary amino acid excretion. This was first described by Uzman and Denny-Brown in 1948, and has subsequently been investigated rather extensively. The exact mechanism for this increase is as yet unknown, although one postulation is that of a competitive reabsorption process taking place in the kidney between the copper chelated dicarboxylic amino acid peptides (which are increased in Wilson's disease), and the amino acids. Thus there may be preferential reabsorption of the oligopeptides to the exclusion of the amino acids, resulting in the increased aminoaciduria. Certain of the amino acids have been found to be increased as much as 20-fold in the urine, with the total amino acid excretion being considerably increased, although not to this degree. There is no correlation between the degree of aminoaciduria and the severity of the disease.

The mechanism for coordinating the findings of increased tissue copper, decreased ceruloplasmin and copper oxidase, increased aminoaciduria, and the tissue damage in this condition is as yet not fully understood. Two hypotheses are described in the literature, by Uzman (1953) and Bearn (1957), to which the reader may refer for further details. One hypothesis postulates a primary defect in protein metabolism, resulting in secondarily decreased ceruloplasmin (Uzman); the other theory is that of a primary defect in ceruloplasmin synthesis (Bearn). Again, there is no relationship between the level of ceruloplasmin and the severity of the disease.

Urinary excretion of copper is likewise abnormal in this condition, and is further altered by the administration of copper chelating agents such as BAL or versene. Cupruria levels in Wilson's disease may be from 10 to 20 times the normal baseline of control subjects. When normal controls are subjected to BAL, their copper excretion may rise perhaps 10-fold, to come approximately to the

normal resting excretion of a patient with Wilson's disease. However, if patients with Wilson's disease, who are already excreting 10 times the normal amount of copper, are subjected to BAL, their excretion will increase still further, with a two to five-fold increase in excretion, mobilizing large amounts of copper from the body, resulting in temporary improvement of symptoms in most cases. Bearn has found that in patients with Wilson's disease, renal function is diminished, with a decrease in para-amino hippuric acid clearance, renal plasma flow, glomerular filtration rate, and tubular secretory capacity. He hypothesizes an increase in cellular copper as interfering with proper renal transport.

Therapy

The therapy of this condition has only recently shown any promise of anything beyond purely symptomatic measures. On the principle that the damaging element is the excessive tissue content of copper, mobilization of the copper from the tissues by means of copper chelating agents containing sulfhydryl groups, as discussed above, has been tried. The two earlier substances tried for this purpose were BAL and versene, but recently a new drug has been introduced in the experimental therapy of this disease, with some promise of more striking results, although presumably still on a palliative basis. Penicillamine (beta-beta-dimethylcysteine), is a substance which is recovered from the urine of individuals who have pre-existing liver damage and who are given penicillin. Penicillamine contains a single sulfhydryl group, and has been shown to bring about a much more profound increase in copper excretion than is possible with BAL. Fister cites one case of truly remarkable remission with penicillamine therapy in a patient described as "virtually moribund" before therapy. This drug is, however, extremely costly and still highly experimental.

Thus we have discussed the metabolic aspects of hepatolenticular degeneration, or Wilson's disease, the cardinal findings being decreased ceruloplasmin, decreased copper oxidase activity in the blood, and increased urinary excretion of copper and amino acids. The patient presented in this article has been found to demonstrate a copper oxidase activity in an entirely normal range; furthermore, on two occasions, aminoaciduria studies have shown a pattern "NOT compatible with Wilson's disease."

So, despite the clinical picture which is so strikingly characteristic of hepatolenticular degeneration, it is difficult to classify this patient under this category, with the absence of biochemical evidence, Kayser-Fleischer rings, or any decrease in liver function.

The other diagnosis which was at first entertained was that of Huntington's chorea, postulated at first on the basis of the strong family history of a similar neuromuscular disorder. At first, on reviewing this particular case and the literature on Huntington's chorea, we are left with little else other than the family history for verification of the diagnosis. But as we shall see, it will come to play an increasingly important part in our conclusions concerning this patient, as it is more fully reviewed.

Huntington's chorea

Huntington's chorea is a hereditary, progressively degenerative disease of the basal ganglia and cerebral cortex. The outstanding symptoms consist of chorea and mental aberrations, usually appearing at ages 35 to 50. It is said by one author that 94 per cent of cases will show onset between the ages of 20 and 60, although there are occasional cases reported during the first and second decades. Falstein's report on juvenile Huntington's chorea in 1941 describes two cases with onset at age 14 and 16, with a history not unlike the patient presented in this paper. The movements usually observed are of a constantly changing, dissimilarly repetitive character (choreiform), involving both the limbs and the trunk, and frequently there are highly characteristic writhing motions of the facial muscles. Rigidity may develop either early or late in the disease, along with hypertonia. Mental changes are said to be invariably present, in one degree or another, in this condition. They are represented by early loss of memory, loss of ability to concentrate and function mentally, progressing slowly or rapidly to a stage of profound dementia in the terminal stages of the disease. The course

of the disease is usually from 10 to 20 years.

Hereditary aspects of Huntington's chorea, along with those of hepatolenticular degeneration, are also described in the literature. Huntington's chorea is generally accepted as being a heredofamilial disorder, "direct and similar inheritance is the rule, the disease appearing as a dominant," although occasional isolated cases will appear without involvement in the preceding generations. The heredofamilial nature of hepatolenticular degeneration is not as yet fully clarified, Wilson being able to say only that it is apparently a familial disease, often appearing in more than one sibling, but that there is insufficient evidence to state definitely that the disease is inherited as a Mendelian recessive. However, Bearn in his review states that the cause is postulated as a homozygous recessive gene.

Criteria for diagnosis

The primary criteria for the diagnosis of Huntington's chorea, then, consist of (1) the typical onset in about the third to fifth decade of life, (2) chorea and dementia of a progressive nature, and (3) a strong family history, inherited in the form of a Mendelian dominant. There are no biochemical criteria yet proposed in this condition, of a similar nature to the abnormalities of copper metabolism in Wilson's disease.

The patient presented in this article, at first glance would not seem to fit into the category of Huntington's chorea, in light of the onset of the disease at age 13, the lack of any choreiform episodes, and the lack of any severe mental deterioration. However, when the family history is reviewed, along with the clinical histories of the affected individuals, one is led more and more to the conclusion that this patient merely represents one more member of a genealogical series of at least four generations of one family afflicted with Huntington's chorea.

Suggestive family history

The patient's father went through school to the second year of high school, and was well until age 28, when he noted the onset of clumsiness of hands, and an inability to grasp and hold on to objects well. By age 30, he sought medical help for poor leg control, was hospitalized at a state mental institution later that year. He was noted to have irregular involuntary movements of his face, body, and extremities (a fairly good description of choreiform involvement), ataxic gait, halting and explosive speech, and increased deep tendon reflexes. Mental status was recorded in that calculation ability was said to be "not too accurate," and thinking was "only slightly reduced." Diagnosis of Huntington's chorea was given, and the patient died at age 34.

Also included in this first generation back of the patient under discussion was an uncle who was admitted to a mental institution in 1936 at age 25, and died four years later. He was noted to have choreic movements of the muscles of the extremities and trunk, the first symptoms of his illness having been a nervousness and shaking of his hands. Mental and emotional changes included the presence of extreme irritability and irresponsibility and emotional lability, increasing over the two years preceding admission. By 1939, at age 28, mental deterioration had progressed considerably, without much progression of chorea, and he died in 1940, at the age of 29. Diagnosis was Huntington's chorea, with a complication of tuberculosis of the spine.

Going two generations back of our patient, the grandmother was hospitalized in 1917 at the age of 38 with a three-year history of progression of jerking, irregular contractions of the muscles of her face, arms, and lower limbs. Mental status was apparently not much impaired, and despite a history of one attempted suicide, and some tendency toward "filthy" habits, throughout her course of therapy she did not demonstrate any marked dementia. She died in 1922, at the age of 43, of a septicemia, with Huntington's chorea listed as a contributory cause.

Also two generations back is a grand-aunt who was admitted to a mental institution in 1917 and died in 1918. Her diagnosis was given as Huntington's chorea, and the cause of death was listed as tuberculosis of the spine.

Three generations back of the patient there are records of a great-grandmother and two great-grandaunts who were also afflicted with a neuromuscular disorder. One was hospitalized in the 1890's at a mental institution and died there. Her diagnosis was given

as Huntington's chorea. One was hospitalized in March of 1891 with violent behavior and choreiform movements which later subsided. She was discharged from the hospital in March of 1892, but no record of her demise is available. These two sisters are said to have had a third sister who was also "insane," but no hospital records are available. The heredofamilial pattern is shown in Fig. 3.

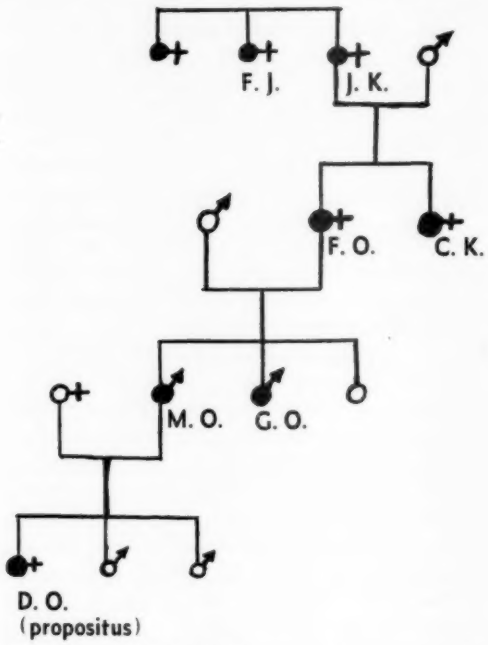

Fig. 3. Genealogical diagram of neuromuscular involvement of the preceding three generations and siblings of the patient under discussion, D. O. Blacked out circles indicate affected members. Information regarding existence of other siblings, without involvement, other than those illustrated, is not available.

Thus we have a total of four generations documented as having been afflicted with varying types of neuromuscular disorders, the earlier three generations having been diagnosed as Huntington's chorea. Furthermore, clinical histories of those more recent members of the genealogical tree, whose clinical records are available, certainly follow a typical pattern for the symptoms and course of Huntington's chorea.

Conclusions

Despite early age of onset, and retention of mental faculties through a 13-year course of the disease, and lack of any choreiform movements at any time, the patient presented in this paper must now be assumed to have an atypical form of Huntington's chorea. This had been tentatively diagnosed and treated for several years as hepatolenticular degeneration at a teaching center hospital, but this diagnosis can now be considered as virtually excluded on the basis of biochemical and other tests, despite the clinical course which so closely resembles that of a classical description of Wilson's disease, or hepatolenticular degeneration.* ●

*The patient expired on October 13, 1959, and the postmortem findings in the brain were said to be grossly and microscopically consistent with and typical of Huntington's chorea; there was no evidence to support a diagnosis of Wilson's disease.

A.M.A. President to address Denver Mental Health meeting

Dr. E. Vincent Askey, President of A.M.A., will be the principal speaker at a banquet, November 18, highlighting the 1960 Annual Meeting of the National Association for Mental Health. The convention, to be held at the Denver Hilton, November 16-19, will be hosted by the Colorado Association for Mental Health and is expected to draw 1,000 people from the 50 states and Canada.

Dr. Cyrus W. Anderson, Colorado State Medical Society President, will be an honored guest. Invitations are being mailed by the Mental Health Association to all doctors in Colorado.

Dr. Askey recently said he would like to dedicate himself during his year as A.M.A. President "toward finding solutions for the problem of mental illness." He underlined his hope that "the physicians of the country will soon open up a full-scale fight against mental illness on all fronts."

Colorado Mental Health Associations throughout the state work closely with the medical profession and are a volunteer citizens' organization working to fight mental illness and to promote mental health through education, research and services. Mrs. Donald C. Bromfield, Association President, urges the medical profession to come to this important meeting, held the first time in the Western area.

Subdural hematoma*

Review of 106 cases

Charles G. Freed, M.D., and Harry R. Boyd, M.D., Denver

Subdural hematomas are not rare in private practice, and many of the cases differ from those seen in clinics and hospital emergency rooms. The condition should be considered in differential diagnosis, even in absence of history of trauma, for early treatment is vital.

IN SPITE OF ALL THAT HAS BEEN WRITTEN about the cause, diagnosis, and treatment of subdural hematomas, these lesions remain a problem for the specialist and the general practitioner alike. Most of the data accumulated concerning these lesions stems from clinics with large emergency services where the care of patients with head injuries is a daily matter of routine. It is felt that the problem of subdural hematomas as seen in the average physician's private practice is somewhat at variance with that seen in the emergency hospital or clinic, and it is for this reason that this paper is presented. The material which we are presenting is from a series of subdural hematomas found in private patients over a period of several years.

Cause

It is generally assumed that trauma to the head, either direct or indirect, is the cause of most subdural hematomas, although a clear history of trauma cannot be elicited in every case. An occasional subdural hemorrhage is due to bleeding from a ruptured congenital aneurysm or to bleeding from an intracranial tumor, but such cases are clinical rarities and will not be considered here.

In our series of cases, 60 of the 106 patients gave a history of a head injury or of general body trauma sufficiently severe to be considered as the cause of the patient's condition at the time of examination. These cases conveniently fall into three groups, depending on the time elapsed between injury and surgical intervention. Those requiring surgery within the first three days after injury are considered as acute subdural hematomas. Of these 60 cases, six fall into this category. Three of these subsequently died as a result of their injuries, while three survived, giving a mortality rate of 50 per cent. It is recognized that this is too small a number to be statistically significant, but it is in agreement with the data accumulated from other series which show a mortality rate in this group of from 50 to 80 per cent[1, 2].

For that group of patients which required surgery from the fourth to the fifteenth day following injury, the outlook is somewhat improved. Fourteen of our 60 patients fall into this group—the so-called subacute subdural hematomas. Of these, 10 survived following surgery and four died, a mortality of about 30 per cent.

The chronic subdural hematomas are those cases in which surgical intervention has been carried out after the fifteenth day following head injury. Two-thirds of these 60 cases fall into this category. In this group of 40 chronic subdural hematomas, one patient died and 39 recovered. The mortality rate in

*Presented at the Midwinter Clinical Session of the Colorado State Medical Society at Denver, February 20, 1959.

this group was therefore 2.5 per cent. In the remaining 40 cases, no clear-cut history of injury was obtained. No deaths occurred in this group which were considered chronic subdurals.

Age incidence

Although subdural hematomas are found in patients of all ages, there is a definite predilection for these lesions to occur in the very young or in those of middle age, or later. The youngest patient in this series was six weeks while the oldest was 86 years. Twenty-one of 106 patients were under one year at the time of surgery, and 55 were 50 years old, or over. Twenty of the patients were over 70 years old.

Sex incidence

One would expect that a lesion of traumatic origin such as subdural hematoma would be more common in the male than in the female and, indeed, this is so; 90 of our cases were found in males compared to 16 in females. It is of interest to note, however, that in infants of one year or less, an age when the opportunity for injury would seem to be equal in the two sexes, that of 21 cases, 17 occurred in males compared to four in females. The cause of this sex predominance is not known.

Presenting complaint

Although the patient harboring a subdural hematoma may seek medical aid for a wide variety of reasons, certain presenting complaints are more common than others. Headache is by far the most common complaint and was elicited from over half of the patients who were old enough to give a history. The character of the headache varied considerably from case to case, although a history of increasing severity was not unusual. The headaches may be intermittent or constant and may be unilateral or bilateral and the site of the headache cannot be depended upon to denote the site of the lesion. The headaches were occasionally accompanied by vomiting, but not often enough to make the presence or absence of vomiting a diagnostic point. Although severe at times, the headaches were rarely of an agonizing intensity as is seen with severe migraine or in some cases of subarachnoid hemorrhage. Codeine by mouth or hypodermically has been quite effective in relieving the headache in most cases.

In addition to headache, some change in personality is a common complaint, usually elicited from the patient's relatives. The personality change may vary from increasing irritability to forgetfulness and from hypomania to stupor. In general, a history of progressive memory loss and increasing stupor is particularly significant.

Convulsive seizures are a relatively uncommon initial complaint, occurring in only nine of our patients. Five of these were adults and four were infants. Seizures, when present, may be generalized or focal. If focal, the likelihood of the hematoma being on the side opposite the side of the seizure is considerable although there may be a hematoma on the other side also.

Physical findings

The neurologic examination in the patient suffering from a subdural hematoma may reveal multiple abnormalities, or it may reveal few or none. No constellation of neurological signs may be considered as diagnostic of this condition. Nevertheless, there are certain findings which are highly suggestive of such a lesion. Among these, stupor and especially a progressive deterioration of the level of consciousness must be viewed with suspicion. Fifty-five of this series of 106 patients showed some degree of abnormal lethargy, varying from inattentiveness to profound coma. In some cases, this was the only sign to suggest the possibility of an intracranial clot. This was particularly true in the case of elderly patients. The level of consciousness often varies from one examination to another, so that the patient may appear to be improving for a while, only to show further deterioration at a later examination.

Second only to deterioration of the level of consciousness is the finding of some degree of unilateral weakness. This may vary from a slight facial weakness on one side to severe hemiparesis. Forty of our cases showed this sign to a greater or lesser extent. In 20, the weakness was on the side opposite the hematoma, while in nine, the lesion and the hemiparesis were on the same side. In the remain-

ing 11 cases, bilateral hematomas were present.

Some degree of papilledema was noted in 11 cases, and is thus a relatively unimportant diagnostic sign. The same is true for Babinski's sign, which was present in only nine cases. Pupillary inequality is also occasionally noted, although the larger pupil occurs sufficiently often on the side opposite the clot to preclude its use as a lateralizing sign to be relied upon.

In general, it may be said that clear-cut neurologic abnormalities such as unilateral weakness, pupillary inequality, abnormal toe signs, etc., are more to be found in younger patients with acute or subacute lesions, while in elderly patients few, if any, of these findings may be present. In such a case increasing lethargy may be the only cause for entertaining the possibility of a subdural hematoma.

The findings in patients one year of age or less suffering from subdural hematomas is rather different from those described above. In 21 infants under a year, a progressive increase in head size was noted in nine, and an initial diagnosis of hydrocephalus was not uncommon. Four of the 21 suffered from convulsive seizures as compared to five of 85 adults. Anemia of greater or lesser degree was a common finding. Several of these babies presented feeding problems and this was occasionally the cause for admission to the hospital.

Laboratory findings

Spinal fluid examination may be helpful at times, and in this series a definite increase in spinal fluid pressure was noted in 16 cases. A normal or low spinal fluid pressure recording by no means rules out the possibility of a subdural hematoma. The spinal fluid was found to be bloody in a few cases and in others, a xanthochromia was noted.

X-ray findings

The plain x-ray films are usually normal in adults with subdural hematomas. The pineal gland was found to be shifted from its normal position in nine of our cases. When present, this sign is extremely helpful in that it gives an accurate indication of the side on which the major clot is to be found.

Special x-ray technics have been used at times to establish the diagnosis of subdural hematoma, or at least a mass lesion in the skull. Pneumoencephalography or ventriculography was used in four cases, although several subdural hematomas were encountered in the process of making burr holes for the purpose of performing ventriculography. Pneumoencephalography has not been used more extensively because it has been our feeling that the dangers inherent in this procedure are greater than those of exploratory trephination of the skull. When air studies are carried out it is necessary to proceed with definitive surgical treatment at once, for the patient's condition may rapidly deteriorate if this is not done.

In recent years, cerebral arteriography has become increasingly popular. This procedure is especially helpful in the diagnosis of surface lesions, such as the subdural hematoma. The angiograms can be done under general or local anesthesia by the percutaneous route, thereby making operative exposure of the carotid arteries unnecessary. Even small subdural accumulations can be accurately localized by this method. Arteriography has the additional advantage that it does not increase cerebral edema and therefore the surgeon may study the films at his leisure rather than being forced to proceed at once with definitive surgery. With the advent of the more satisfactory iodine-containing contrast media now available, it is our feeling that angiography is probably safer than air studies if a pathological intracranial condition is present. Subdural hematomas produce a characteristic arteriographic picture. This is due to the mass of the clot overlying the cortex which prevents the dye-filled arteries from closely approximating the skull as they normally do.

In infants the x-ray films often reveal some degree of pathologic enlargement of the skull if a subdural hematoma of long standing is present. In the young patient with a fairly recent subdural, separation of the sutures is a common finding. It is difficult or impossible to differentiate the x-ray findings in a case of subdural hematoma from those due to other causes of increased intracranial pressure in children, such as hydrocephalus, brain tumor, abscess, or cerebral edema.

It has been our practice to do subdural

taps in those children with open sutures who have evidence of increased intracranial pressure, or are suspected of having subdural hematomas. If this test reveals bloody or xanthochromic fluid in the subdural space, the diagnosis of subdural hematoma is established. If not, other tests to determine the cause of the increased intracranial pressure may be carried out at the same sitting.

Treatment

In adults, definitive surgical treatment should be carried out as expeditiously as possible after the diagnosis of subdural hematoma has been made. In those cases in which the clinical history and physical findings are highly indicative of such a lesion, trephination of the skull may be carried out as a primary procedure without recourse to special x-ray studies beyond the plain skull films. In the event of a negative exploration, the surgeon must be prepared to carry out such other studies as may be indicated to establish a diagnosis. Ventriculography may be conveniently done through the exploratory burr holes, or the patient may be returned to the x-ray department for arteriography.

Because of the high incidence of bilateral subdural hematomas, bilateral trephination of the skull has been carried out unless other studies have definitely localized the clot to one side. Although many neurosurgeons have advocated multiple trephination of the skull on both sides, this was not necessary in the great majority of our cases. Satisfactory results have been achieved by bilateral anterior parietal trephination in those cases in which the side of the hematoma has not been determined preoperatively by x-ray studies. After evacuation of the clot, the subdural space is thoroughly irrigated with Ringer's solution, and a drain is left in place for 24 to 48 hours. If the side of the clot is known, or the hemorrhage is sufficiently recent so that considerable solid clot remains, a subtemporal decompression has been done. In this series, these simple procedures have proven effective and may be carried out with dispatch, which we feel is important, especially in old people who are often critically ill. It has been necessary to reoperate upon one patient because of reaccumulation of the subdural fluid.

While in some cases, recovery of consciousness has been dramatic following surgery, many patients recovered slowly over a period of days. The most meticulous postoperative care is required, both on the part of the physician and the attending nurses. Careful attention must be paid to fluid balance and metabolic requirements, as well as to respiratory exchange and cardiovascular status. Occasionally a considerable degree of postoperative cerebral edema may be present. This may be controlled by judicious lumbar punctures or the administration of hypertonic solutions, of which 30 per cent urea solution appears to be the best[3].

In infants, a different course of treatment has been followed. If the patient is in poor condition at the time of diagnosis, as is often the case, subdural taps have been carried out daily or on alternate days until anemia has been corrected, seizures at least partially controlled, and general nutritional deficiencies reversed. When the child is in the best possible condition, trephination of the skull is carried out on one or both sides as is indicated. If a well-formed subdural membrane is present, a small frontotemporal parietal bone flap is made on one side and as much as possible of the subdural membrane is removed. It is usually possible to strip the membrane from the cortex of most of the frontal, parietal, and temporal lobes. The dura is then closed with drainage of the subdural space. The bone flap is held in place with sutures through the bone or pericranium, and the scalp is closed in two layers. If the membranes are bilateral, the second side may be done in 10 to 14 days.

It is necessary to remove the subdural membranes because they form a constrictive sheet over the cerebral hemisphere, thereby hindering its normal growth. This is unnecessary in the adult after full brain maturation.

Results of treatment

In our series of 106 patients treated by the methods outlined above, the over-all mortality rate has been 9.4 per cent. As has been previously noted, the mortality is highest in those patients requiring surgery shortly after injury. In the group of 86 patients in which the period between injury and operation was 15 days or more, or where a definite history

of injury was lacking, there was but one death, giving a mortality rate of 1.2 per cent.

Summary

The subdural hematoma is a treacherous lesion. At times, its presence may be diagnosed with ease, but at other times—and this is more often the case—it may be detected only after the available diagnostic procedures have been exercised to the fullest. The most important single factor contributing to the diagnosis a high degree of suspicion on the part of the attending physician. If diagnosed and properly treated, the chances for the patient's recovery are good; if overlooked, progressive deterioration and eventual death is the usual course. •

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What price security?*

Benjamin Gitlitz, M.D., Thermopolis, Wyo.

WE WILL DISCUSS SOME OF THE ECONOMIC policies of our government to indicate that it leaves much to be desired. Politicians, our legislators, are encroaching more and more on the freedoms guaranteed to us by our forefathers. In the early 1900's physicians were cautioned to stay out of politics, but many played an important part in the early days of our country. Many gave their lives in the Revolutionary War and some had fortitude enough to sign the Declaration of Independence. Physicians were represented at the Continental Congress and their signatures are visible on the Constitution of the United States. During my medical school days I was cautioned that the practice of medicine would be so time-consuming that it would be impossible to take part in any political discussion. Furthermore, it was indicated that any show of policy in politics would be looked upon disparagingly by our patients.

Government policies and legislation

Expansion of federal government policy to include medical care, especially for the aged, and other policies which should be a local matter, have caused physicians to look askance at this type of thinking. Since a politician is rarely interested in the general good, it behooves physicians to take part in policy making; they know more about the health needs of the public than any other person.

It was when the Wagner-Murray-Dingell Bill was proposed that physicians became aware of the fact that their toes were being stepped on. At that time the A.M.A. took a definite stand and it was through their efforts that this bill was defeated. However, as we look back we find that certain portions of this bill have been included in other measures and passed in spite of our determination to defeat them. This year we have seen the Forand Bill proposed and, due to our hard work and the active A.M.A. group in Washington, this bill has not been passed and President Eisenhower has called a White House Conference on Aging for 1961.

Physicians and politics

The A.M.A. House of Delegates is now urging all physicians to take a more active part in public affairs on all levels. A resolution on the subject, introduced by the Oklahoma delegation in June, 1960, served as a

*Address of the outgoing President of the Wyoming State Medical Society presented before its 57th Annual Meeting, Jackson Lake Lodge, Moran, Wyo., September 7-10, 1960.

starting point for discussion in the reference committee, particularly in the area of the M.D.'s role in political activity. The report adopted by the House noted that "it has become apparent that the medical doctors in America and their organizations are still not exerting the effective influence on local, state and national political affairs which is their right and obligation."

The A.M.A.'s policy making body "not only urged individual members of the association to take a more active part in the local, state and national government, endeavoring to select qualified candidates for office regardless of party affiliation of such candidates, but also urged physicians to work for the creation of policies which preserve representative government, free enterprise, fiscal solvency and the integrity of the dollar." Dr. E. Vincent Askey, new A.M.A. President, stated "physicians must assume health care leadership in the decisive decade ahead, or they will lose it by default to others unqualified to handle it. When a physician is reluctant to participate in political affairs, he leaves to others responsibilities in the field of political action, that only he as an individual doctor can fulfill."

The A.M.A. News of July 11 states that, "Today it is obviously not enough that a doctor upgrades his knowledge, sharpens his skill, works endless hours tending his patients, and provides leadership in a broad and highly technical field of medical practice. He must demonstrate leadership in helping to retain the freedom of individual opportunity for a voluntary system of medical care, the high standards of that care which he has helped to build and to which he is dedicated to protect."

Social Security

There are a number of aspects of federal legislation which I feel should be considered to make our point. The first is Social Security, a compulsory tax for public charity. It was originally presented as a tax in a welfare program. However, this was extended in a number of proposals in 1939, 1952, 1956, and 1958. The money goes into a general fund and is used immediately. The individual's handout will be paid for by his children. Each individual is thus paying tax for someone else.

Social Security gives no one a contract since Congress can alter, amend, or repeal it at will. The first act passed by Congress promised permanent coverage if the tax was paid for a period of five years. It also guaranteed that the money would be returned to the taxpayer or his heirs if payment was made for this period. In 1939 this law was amended so that a 10-year period of payment was necessary. However, at the same time, Congress took the privilege of not giving the money back and 6.4 million people died during this period without getting any pension or refunds for themselves or their families. The goverment thus has shown no respect for small rights and has in a sense dishonored itself. The Social Security system is now insolvent. In the five changes made since 1950 the rate has been doubled, the number of persons now receiving benefits has increased 400 per cent, and each election year Congress eases the eligibility and the benefits increase.

The government has allowed Social Security to borrow 21 billion dollars from other sources to cover its deficits. At the present time over 1.6 billion dollars of this loan has been used for Social Security. The cost of the program has increased 35 per cent and there was a 20 per cent increase in income. It is therefore obvious that Social Security is now in the red.

Forand bill

We all know what the Forand type bill proposes. It is supposed to be tacked on to this now ailing Social Security system so that it will include compulsory care for the aged and disturb the patient-physician relationship. In addition to this, it would obviously mean poor health care, since it would be under federal control. The Forand type of legislation is not insurance, for it guarantees nothing—Congress can change these rules at will. An individual pays for so-called care of a fixed type, no matter what his needs may be. That there is no real need for this type of legislation has been indicated since coverage will result without federal help.

An important study by James W. Wiggins and Helmut Schoeck of the Sociology and Anthropolgy Department at Emory Univer-

sity in Atlanta published in August, 1960, revealed that the over-65 population of the United States enjoys relatively good health; 92 per cent said they had no unfulfilled medical needs; 8 per cent listed lack of financial resources as one of the least important reasons for their failure to relieve the need; 64 per cent had health insurance and most advised that they could pay a big medical bill by conventional and personal means. Many of them were concerned with the problem of inflation which has reduced the value of Social Security along with everything else. This makes one question the need for federal intervention in a problem which can be effectively dealt with through private insurance and local welfare organizations.

Medical care for aged

More recently the Mills Bill has been proposed. This sets up a federal grant and aid program for the medical care of the near needy, to be administered locally for locally determined beneficiaries. It preserves voluntarism which permits the non-needy to take care of themselves, and follows the traditional federal-state organizational structure of our nation. This bill has been backed by the American Medical Association and is more desirable than the Forand Bill.

However, it will still result in the federal government encroaching on our freedom. Most recently the Kerr Amendment was set up for aged care. The Kerr program puts medical care provision under Title 1, The Old Age Assistance Program, and would cover the 2.4 million persons now receiving state old age assistance. The House Plan, which would be in addition to the Kerr Amendment, is a slightly modified version in which federal-state payments are made to persons who become medically indigent whether or not they are receiving state old age assistance. These plans would also be very expensive and difficult to administer. This bill was passed on August 29, 1960. It is estimated that it will cost $202 million for the federal government and $61 million for state governments during its first full year.

Colorado has one of the most liberal programs for hospitalization and medical aid for old age pensioners. It is interesting to note that this program is now costing $102,000 a month more than is available for payments and is having financial difficulties. Lieutenant Governor Robert L. Knous, who is Chairman of the commission which wrote the medical plan, hoped that there would be no serious cutback in this and states that the Legislature should appropriate funds to make up any money required. This is typical of a legislative reaction—simply increase taxation and appropriation and pay no attention to the cost.

Physicians and Social Security

We should now consider the problem of Social Security and physicians. Many of our colleagues have felt that Social Security should include physicians since everyone else is getting it, but the increasing cost of Social Security has resulted in a deficit financing situation as noted previously. I have also indicated that nothing has been promised and that things can be changed by Congressional action.

A recent study indicates that a private individual investing $216 a year in a mutual fund can have $35,332.31 at retirement. The doctor could then start to drain off the annual interest without touching the principal and have an income of $2,110.94 a year, or $176.66 a month. He could still collect this amount, even if he continued to work. Or if he desired under these circumstances he could dip into his principal and come up with $300 a month for the next 10 or 12 years. Unless he were 72 years old he could not collect any Social Security if he earned more than $100 a month. The maximum Social Security retirement income benefit is $116 a month and is a high priced annuity program.

Foreign aid

Let us next consider the foreign aid program. One of the things we wonder about is, have the economic results of our foreign aid been those desired by the American people? Let us look into it a little more closely. In Great Britain, the British Labor Party won a victory in 1945, putting Mr. Attlee in power. At that time the Labor government embarked on a great plan to establish socialism in Great Britain. During Labor administration, the United States provided aid of six billion

dollars for an average of one billion dollars per year, or a total of $600 for every family in Great Britain. In 1952, the situation became so bad that the Labor government was defeated and the Conservatives won by a narrow margin. For the next five years, under the Conservative government, the American aid was at the average of 170 million dollars annually or one-sixth the rate during the Labor regime. The policies of a Conservative government, which included discontinuing rationing and returning the steel and road transport to private ownership, were so successful that aid was no longer needed.

Inflated dollars

In West Germany the situation was different. In the spring of 1948, France, Britain and the United States invited the Netherlands, Belgium and Luxemburg to develop economic and political policy for Western Germany. It was decided to establish a republic to reform the money credit system and to end inflation by introducing a new mark. The West German republic began operation in May, 1949. From the end of World War II until the formation of the West Germany republic, the occupying powers had controlled political and economic policy, dismantled industry and set up a network of price controls and rationing, with resulting rapid inflation of currency. From 1946 through 1949, this expense to the United States exceeded three billion dollars in foreign aid to prevent starvation and the hardship under this type of control. When the West German authorities assumed their duties they applied the principles of free market economy.

The United Nations Report of that time is enlightening: "The monetary reform in June, 1948, completely changed the picture. Owners of speculative stocks of goods were forced to sell and an increased supply of raw materials made a considerable rise in industrial production possible. Farmers became more willing to market their products and the improved supply of both food and industrial goods increased the incentive to work. Industrial production rose by nearly 50 per cent during the second half of the year." In 1950 when a government dedicated to free enterprise was functioning in West Germany, American aid was reduced to half of that of preceding years; in 1951 to one-third, and in 1952 was decreased to a token amount. In contrast we think of the three billion dollars spent trying to make West Germany function in a straightjacket of price controls and rationing.

In France, 1944-1948, under the Fourth Republic, 26 successive governments attempted to cope with what can be described as planned perpetual chaos. Early in the 14-year period, the socialists nationalized the principal banks and insurance companies, railroads, airlines, merchant shipping, coal mining, utilities, much of the munitions industry and the larger automobile manufacturers. Creeping inflation had become a way of life in France. Compared with the ruin in Germany, war damage in France was small. There was no question of feeding millions of refugees or alleviating other hardships beyond the capacity of the French government to solve it. Nevertheless, we provided aid on a large scale and continued it long after aid to Britain and West Germany was drastically cut. Specifically, in the eight years from 1948 to 1955, we gave France one million dollars per year.

The turmoil in France finally became unbearable. After a series of crises, the people and their representatives accepted DeGaulle virtually as a dictator. The United States by its aid simply prolonged the life of the Socialist Fourth Republic at a cost which was four times greater than the aid given to the West German republic under a free enterprise regime.

Communist arms

Indonesia has been encouraging Red Chinese aggression. India has censored the Western effort to recover Suez, but has refused to censor the Soviet invasion of Hungary. Even Nasser's United Arab Republic equips its armed forces with communist weapons and communist personnel. Careful study indicates that every one of the so-called neutral countries that we are aiding is committed to a system of state socialism. We are strengthening socialism in these countries and are perpetuating the inefficiency and waste that always attends government control of colonies. Our present foreign aid pro-

gram is not only poorly administered but also ill conceived. It has not, in the majority of cases, made the free world stronger but has made America weaker. It has created in minds the world over, an immature nation that puts prime reliance not on spiritual or human values but on the material things that are stock in trade of communism and communist propaganda.

Barry Goldwater in his book, "Conscience of a Conservative," makes the following comments: "Increasingly our foreign aid goes not to our friends but to professed neutrals and even to professed enemies. We furnish this aid under a theory that we can buy the allegiance of foreign peoples, or at least discourage them from going communist by making them economically prosperous. Everything we have learned from experience and from observation of the nature of man, refutes this theory. It makes little sense to try to promote anti-communism by giving money to governments that are indeed far more inclined to Soviet type society than to a free one. Many of the allegedly neutral nations that receive our aid are not neutral at all." The United States has voted a foreign aid of 4.5 billion dollars yearly, an amount which is equivalent to our deficit which has piled up year after year.

Farm problem

Let us now consider the farm problem. The farmer has long been able to contend with his enemies, such as bugs, weeds and the weather. Even the worst drought has ended in a few years. However, the farmers' politician friends have now created a farm problem which no one can solve. Professor William H. Peterson of New York University recently completed a study of the attempt of the government to solve the farm problem. In this he points out that for more than a generation there has been an increasing surplus of agricultural products. In the year 1958, the biggest farm surplus of all time appeared. Each time the planners hopefully believed that victory was at last theirs, with surpluses declining or even stabilized, new obstacles appeared. In May, 1959, the government owned or had a lien on more than three billion dollars worth of wheat and more than two billion dollars worth of corn. All in all, the government's total investment of farm commodities now runs over nine billion dollars. By June, 1963, under the present law, the U.S.D.A. expects the government's stake in farm surplus to climb to about 12 billion. Farm surpluses have increased three and a half times since 1953 and the carrying charge of storage, transportation and interest, cost the government more than one billion dollars annually.

The main problem with farming is intervention and is a strictly political problem. Of course, the usual natural problem of insects, erosion and so forth would be present, but the relative efficiency and inefficiency of individual farmers would correct this problem. Farm intervention began in a mild way. An attempt was made to raise farm income by providing cheap credit. This, however, failed to prop the farm income for the marginal and submarginal producers. They thereby got a subsidy, sufficient to hold them on the land, and thereby made the surplus problem worse. Price fixing schemes and inevitably surplus control and disposal problems resulted. Intervention piled on intervention. Finally the basic freedom and vitality of farming was thoroughly smothered. It is interesting to note that the Farm Journal in 1959 indicated in one of their polls that 55 per cent of the farmers voted for no support, no control, no floors, free market price, get the government to clear out. Price supports as an integral part of farm intervention are essentially a form of price fixing.

In 1770, the government of lower Bengal tried to restrain the monopoly of rice when their crop failed. Speculation was forbidden and a price of rice was strictly controlled. The result—one-third of the population perished. In 1886 another crop failure was experienced in the Bengal region. This time the authorities did nothing to limit prices but did everything in their power to stimulate speculation. Many people entered the trade and the upshot was that the price of grain advanced by a few farthings, much less than the controlled prices at the end of the early famine and virtually nobody died of starvation.

Professor William H. Peterson concluded "that price acreage and marketing controls have proved ineffectual, partly because of

technology, partly because of politics, partly because of farm intervention and mainly because of their inherent contradictions." The Soil Bank measured by its stated objectives has failed. In 1958, for example, on the smallest acreage in 40 years, U. S. farmers harvested the largest crop output on record. Farm policy has destroyed many of the farmers' market by overpricing agricultural commodities and by subsidizing in effect farm and synthetic competition. The real farm surplus is surplus farmers. Price supports perpetuate this surplus with various alternative subsidies such as the Brannan Plan and other direct payment schemes. Farm policy is also a 30-year failure and a hopeless patchwork of laws which frequently operate at cross purposes. In the 1957 crop year, while the government was loaning 3,447 million dollars to support the crops being produced by 10 companies, another government agency was, under a different program, paying these same companies $557,495.35 not to produce crops for another 10,243.6 acres which they controlled. Since many farmers now grow for government storage and not for market consumption, they are less concerned with the quality of their product and as a result there is a sharp increase in yellow belly wheat which is of an inferior quality and has been moved into government inventory.

The irony of this is that the farmer to be saved, wasn't. Since the New Deal, one out of every three farmers has quit. The exodus from farming is, in a sense, a triumph of efficiency over intervention and continues to the present day. The second phase of this tragedy of modern farm intervention is that it is but a chapter in a much longer unfinished story; it is part of a philosophy and a way of life, a return to mercantilism, a recall to a planned society. The farm operators of the United States now number fewer than five million in a nation's population of 180 million. More than half of the farm operators do not share in Uncle Sam's beneficence but lose because they must pay an unnecessary high price for cattle and poultry feed, for example, and because, like the rest of us, they buy most of the food for their families. A small minority of the minority who do benefit is given the cream from the farm program.

Defense spending

Our defense spending efforts can be summarized with a news item from the U. S. News and World Reports of March 14, 1960: "Defense spending came under fire in two reports to Congress. A committee staff report charged that failure of the Armed Services to complete standardization of supply systems was costing 450 million dollars a year." Comptroller General Joseph Campbell told Congress that the Navy spent 608 million dollars on unreliable radar sets and aircraft incapable of performing the designated mission.

No one is suggesting that we decrease our defense efforts. However, a more careful appraisal of our expenditures in the name of defense is in order.

Gold situation

What relation has this to inflation and the gold standard? The statutory reserves of the nation's commercial banking require about 11 billion dollars. Gold outflow from the United States Treasury was speeded up moderately during the early weeks of August so that a loss of 90 million was made in that period. This compared with 68 million in the previous fortnight shows the tremendous increase of loss of gold. Foreign countries are becoming disturbed as to whether or not the United States is embarking on another bout of inflation accompanied by unbalanced budgets as indicated by our election campaign.

At last report the U. S. stock was 19,163 billion dollars, down 293 million dollars from December 31. From this total must be deducted 500 million which is owed to the International Monetary Fund and repayable on demand. The U. S. stock pile was also padded by treasury action, selling U. S. dollars to the fund for gold. These transactions amounted to 600 million dollars. A total of 1.1 billion dollars of fund gold has thus been used for four years to bolster the droopy U. S. gold position. Every Western nation includes U. S. dollars as part of exchange reserves and depends upon them to support its own currency. If such dollars were to develop a disturbing degree of shakiness, the results would be economically alarming.

At the present time the independence of the U. S. dollar has steadily been undermined

since the war. First by the inflation policy of the U. S. government and secondly by the endeavor to finance most of the free world along with the stupendous and magnificent defense effort. Foreign nations have, in the past three years, acquired ten billion dollars of American money on top of the ten billion and more which they had acquired slowly over long years of trade. This year the amount will grow by 2.5 billion. Even the demand of two billion dollars of American gold will put the American stock, already precariously reduced, at the alarm point. At the present time, the United States probably has only seven billion dollars of gold after allowing monetary requirements with which to meet the theoretical foreign goals of 21 billion dollars.

It has not been widely advertised by the U. S. Treasury but the State Department made a gentleman's agreement last fall with the friendly countries to the effect that these nations would go easy on their demands upon the U. S. for gold. Obviously to denude the U. S. of gold would greatly weaken the value of their own holdings of dollars and would injure the American effort to militarily protect the West. This agreement has been respected to the most part and withdrawals up to July last year were of small dimension.

However, a new administration may cause a change to be made. If the worth of the U. S. dollar were ever to come into serious question, no foreign finance minister would have any choice between dollars and gold, if he valued his own neck. Decline of U. S. interest rates is an important factor at the present time. As long as foreign countries could get high yields for U. S. short term securities, the banks, foreign ministers, were persuaded to leave their extra funds in the U. S. in the form of these notes. However, the recent reduction of official interest rates in the United States, in order probably to promote a pleasanter atmosphere in this election year, is running the risk of some loss of gold. A careful study of our economy, therefore, leads to the following conclusions:

1. From a position of great power after World War II, the nation's money credit system has deteriorated under the influence of continued inflation at home and lavish giving and lending to nations abroad.

2. Apparently before long the vast superstructure of inflationary debt will rest on the gold base, none of which is free of foreign demand claims.

Adding to this the possibility of foreign countries demanding their gold, we can easily see our economy at present is not on a firm basis. The inflationary policies of our government have robbed our people of a large portion of their savings by decreasing the purchasing value of their money. Wage increases and featherbedding practices have priced some of our goods out of foreign markets and encouraged imports from abroad. The socialization of our government and the creation of a welfare state have resulted in deficit financing. The present gold deficit and our poor economic status are the effects of Congress' actions. I would like to quote at this time from an article in the American Institute of Economic Research, which states: "If Russia had been able to plant its agents, such as unknown Alger Hisses and Harry Dexter Whites, in the key positions of the U. S. government, with instructions to carry out Lenin's plan for the destruction of a capitalist economy by means of inflation, they could hardly have accomplished a more thorough job of gutting the economy by extracting the basic gold reserves."

In conclusion, may I quote from the Wall Street Journal: "What is wrong with our thinking is a growing emphasis in our society on security. The wrong comes about when in the name of the alleged greater good of all, collective security is permitted to disregard or destroy individual rights of freedom. Furthermore, it wrongs more than the individual for as one man's freedom is lost, freedom for all men is diminished, and though security is one of man's greatest aspirations, perhaps we had better remember that security without freedom is history's bitterest jest, and there is a point where overemphasis on one can immeasurably destroy the other." •

MATERNAL MORTALITY

The following cases have been reviewed by the Colorado Maternal Mortality Committee* and selected for publication because of their educational value. Submission of similar cases is invited from other committees in the Rocky Mountain Region.

Case 5†

This patient was a 36-year-old, white, gravida two, para one, who was first seen by her physician in October, 1957, in the fifth month of pregnancy. Her first pregnancy had been uncomplicated. Her weight was 116 pounds and no abnormalities were noted on physical examination. Her B.P. was 138/70. Urinalysis and serology were negative. Pregnancy progressed normally and the patient was admitted to the hospital in labor on March 2, 1958. Labor was uncomplicated, sedation consisted of Demerol 100 mg., and Sod. Delvinal 100 mg. Spontaneous delivery of a living female infant occurred after eight hours of labor under drop ether anesthesia. The placenta delivered spontaneously after 20 minutes. There was no unusual bleeding. Approximately 10 hours after delivery the patient had a severe convulsion, followed by a second one shortly afterward. An intravenous infusion of 10 per cent glucose in distilled water was started and magnesium sulfate was administered intravenously. Convulsions ceased following this therapy but the patient remained comatose and expired approximately 24 hours following delivery.

Comment

The committee felt that there was insufficient information on this case to arrive at a decision concerning preventability. There was no information concerning the condition of the patient from the time of delivery to the onset of convulsions 10 hours postpartum. In addition, in the absence of autopsy, the cause of death is not clear, whether postpartum eclampsia or cerebral vascular accident.

Case 6

This patient was a 33-year-old primigravida whose EDC was Feb. 10, 1959. Her past history was unusual in that a questionable diagnosis of myasthenia gravis had been made seven years previously. Her prenatal course was described as excellent throughout with normal B.P., negative urinalysis, normal blood count and a total weight gain of 23 pounds. There had been one-plus edema of the ankles on the last two visits prior to admission to the hospital. The patient was admitted to the hospital in labor on February 12 with a frank breech presentation. X-ray pelvimetry was done and pelvic measurements were adequate. Labor was intermittent and ineffectual throughout Feb. 13 and 14, with maximum cervical dilation of 4 to 5 cm. On Feb. 15, a cesarean was elected because of ineffectual, prolonged labor in a primiparous breech.

The patient was typed and cross matched for two pints of blood and an eight-pound male infant delivered by classical section without difficulty. Blood loss was described as minimal. Premedication was Nembutal 3 grains and atropine 1/150 grains given approximately two hours prior to surgery. Anesthesia was spinal with 150 mg. of procaine. One unit of blood was started at the beginning of surgery. Immediately after completion of the surgery, the patient suddenly became deeply cyanotic and went into profound shock. Although there were no signs or symptoms of transfusion reaction, the blood transfusion was stopped and the second unit of blood started, in addition to vasopressors—Ephedrine, Neo-synephrine, and Wyamine. Solu-Cotef was also given over the next three hours. The patient responded briefly to treatment only to lapse once more into deep shock. She complained of some itching of the chest but no urticaria. During the last hour prior to death the patient began to bleed from the closed abdominal wound and from the vagina and at the same time passed blood tinged urine per catheter. She never recovered from shock and expired three hours postoperatively. An autopsy was not performed.

Comment

It was the opinion of the committee that this disaster was most likely the result of amniotic fluid embolism or transfusion reaction. It was felt that cesarean should have been performed earlier before the patient became exhausted from prolonged, ineffectual labor. Low cervical, rather than classical section would have been the better procedure. The risk involved in blood transfusion was significant enough to preclude the routine administration of blood. Premedication with Nembutal grains 3 was poorly chosen. Fibrinogen deficiency should have been corrected. This death was voted not preventable by the committee.

---

*Committee Members: E. N. Akers, M.D.; Gerard W. delJunco, M.D.; George M. Horner, M.D.; Paul F. McCallin, M.D.; Leo J. Nolan, M.D.; James R. Patterson, M.D.; L. W. Roessing, M.D., and Ben C. Williams, M.D., Chairman.

†Previous cases reported in May and September, 1960, RMMJ.

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Pictured are the results obtained with the PATHILON (tridihexethyl iodide)–meprobamate combination† in a double-blind study of 303 ulcer patients, extending over a period of 36 months.* They clearly demonstrate the efficacy of **PATHIBAMATE** in controlling the symptoms.

SIDE EFFECTS	TRIDIHEXETHYL IODIDE† MEPROBAMATE	TRIDIHEXETHYL IODIDE†	METHANTHELINE BROMIDE	ATROPINE SULFATE	PLACEBO
DRY MOUTH	1%	5%	72%	46%	5%
STOMATITIS	1%	0%	28%	14%	0%
VISUAL DISTURBANCES	0%	0%	50%	34%	1%
URINARY RETENTION	0%	0%	18%	11%	1%
DROWSINESS	20%	0%	0%	0%	0%
COMPLICATIONS OR SURGERY					
HEMORRHAGE	0%	9%	3%	9%	10%
PERFORATION	0%	0%	0%	6%	0%
OPERATION	0%	5%	5%	14%	2%
RECURRENCES					
NONE	28%	23%	25%	17%	26%
FEWER AND MILDER	67%	62%	52%	37%	24%
SAME OR MORE	5%	15%	23%	46%	50%

*Atwater, J. S., and Carson, J. M.: Therapeutic Principles in Management of Peptic Ulcer. **Am. J. Digest. Dis.** 4:1055 (Dec.) 1959.

†PATHILON is now supplied as tridihexethyl chloride instead of the iodide, an advantage permitting wider use, since the latter could distort the results of certain thyroid function tests.

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control the tension — treat the trauma

THE WASHINGTON SCENE

A monthly news summary from the nation's capital by the Washington Office of the A.M.A.

Representatives of the medical and health professions, the federal government and national civic groups are cooperating in development of a program for starting the general use of the Sabin live-virus poliomyelitis vaccine next year.

Shortly after clearing the Sabin vaccine for general use, Leroy E. Burney, M.D., Surgeon General of the Public Health Service, asked 23 nongovernment organizations to designate members to serve on a Surgeon General's Committee on Poliomyelitis Control.

An Agenda Committee met with PHS officials in Atlanta, Oct. 11 and 12, and drafted a basic agenda for a meeting of the Control Committee in midwinter. At the Atlanta meeting, preliminary consideration also was given to administrative and technical problems involved in use of the live-virus vaccine developed by Albert B. Sabin, M.D., of Cincinnati.

The Agenda Committee was made up of representatives of the American Medical Association, American Academy of General Practice, American Academy of Pediatrics, Association of State and Territorial Health Officers, Children's Bureau and the National Foundation.

The Sabin vaccine is not expected to be available in substantial quantities before mid-1961.

The chief question is whether the vaccine—which is given orally in the form of pills, liquid or candy—will be administered on individual or mass community basis. The PHS special committee that recommended approval of the oral vaccine said that the community basis would be better.

"Because of the unique nature of live poliovirus vaccine, with its capacity to spread the virus in a limited manner to nonvaccinated persons, the committee cannot make recommendations for manufacture without expressing concern about the manner in which it may be used," the special committee said.

"The seriousness of this responsibility can be illustrated, for example, by the known potentiality of reversion to virulence of live poliovirus vaccine strains, and the possible importance of this feature in the community if the vaccine is improperly used.

"For example, the vaccine has been employed largely in mass administrations where most of the susceptibles were simultaneously given the vac-

cine, thus permitting little opportunity for serial human transmission; or, it has been administered during a season of the year when wild strains have usually shown limited capacity for spread. This experience should provide the basis for developing usable practices for the U.S.A."

The special committee also said attention should be given to administration to special groups, such as very young children, pregnant women, and susceptible adults.

"Even more important is the planned continuation of this program as long as necessary to achieve and maintain the required results," the committee said.

The committee was headed by Roderick Murray, M.D., of the National Institutes of Health. Its other members were four M.D.'s and one Ph.D., all of whom were connected with universities except for one M.D. from the PHS's Communicable Disease Center at Atlanta.

Neither the committee nor Dr. Burney anticipated that the live virus vaccine would replace the killed-virus Salk vaccine used since April, 1955.

"It appears probable that only a unified national program which utilizes each of the available types of vaccine to its best advantage can accomplish the total prevention of outbreaks," the committee said.

Dr. Julian P. Price of Florence, S. C., Chairman of the A.M.A.'s Board of Trustees, predicted the live-virus vaccine "will be one more powerful weapon against an ancient and crippling disease." He said that physicians "have conscientiously pushed immunization with the Salk vaccine and now, with this new vaccine, the profession is hopeful that even better results can be achieved."

Five states were ready soon after the effective date of Oct. 1 to submit plans for participation in the federal-state program of health care for the needy and near-needy aged persons which recently was enacted into law. The states were Arkansas, Michigan, New Mexico, Oklahoma and Washington.

As of early October, another 25 states were preparing to consider legislation to set up such a program or had indicated a willingness to proceed without new legislation. They were Alabama, California, Colorado, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Kentucky, Louisiana, Massachusetts, Montana, Nevada, New Jersey, North Dakota, North Carolina, Ohio, Pennsylvania, Rhode Island, Utah, West Virginia, Virginia and Wyoming.

Arthur S. Flemming, Secretary of Health, Education and Welfare, urged all states to take part in the program as soon as possible. But he also said he hopes that Congress in the next session will approve a Republican plan for a supplementary federal-state program to help provide private health insurance for elderly persons who cannot meet their medical expenses.

It appears that the issue probably will arise in Congress next year because some Democrats also have said they will again sponsor legislation that would provide health care for aged persons through the Social Security system.

The A.M.A. has launched a "comprehensive study and action program" to guide Americans in spending their health-care dollars more wisely.

The A.M.A.'s new Commission on Medical Care Costs has set out "to find answers to the many questions being raised about medical care costs and to present the findings frankly and forthrightly to the medical profession and to the public."

The program is "dedicated to promoting the highest quality health care at the lowest cost." Louis M. Orr, M.D., of Orlando, Fla., chairman of the commission, said that "any barrier that stands in the way of this objective should be removed—immediately."

One of these barriers is money wasted on ineffective nonprescription or over-the-counter drug products, such as vitamins, food fads, and rheumatism and arthritis remedies. A.M.A.'s Council on Foods and Nutrition has estimated that much of the estimated $350 million spent annually on self-prescribed vitamins is wasted.

The A.M.A. is urging physicians to alert their patients and the public to the latent dangers involved in self-prescribing and to the folly of throwing their health-care dollars away on quackeries.

On another front in the war against quackery, Food and Drug Commissioner George P. Larrick reported that during the past 12 months the FDA had seized falsely promoted vitamins, minerals and other so-called "health foods" valued in excess of $1.5 million. He said that the amount of misinformation, pseudo-science and plain "hokum" on health care reaching the public through books and magazine articles is increasing.

Aristocort

Triamcinolone has long since proved its unsurpassed efficacy and relative safety in the therapy of *rheumatoid arthritis, inflammatory and allergic dermatoses, bronchial asthma,* and all other conditions in which corticosteroids are indicated. But ARISTOCORT has also opened up new areas of therapy for selected patients who otherwise could not be given corticosteroids. Medicine is now in an era of "special-purpose" steroids.[1]

One outstanding advantage of triamcinolone is that it rarely produces edema and sodium retention.[1,2]

The clinical importance of this property cannot be overemphasized in treating certain types of patients. McGavack and associates[3] have reported the beneficial results with ARISTOCORT in patients with existing or impending cardiac failure, and those with obesity associated with lymphedema. Triamcinolone, in contrast to most other steroids, is not contraindicated in the presence of edema or impending cardiac decompensation.[3]

Hollander[1] points out the superiority of triamcinolone in not causing mental stimulation, increased appetite and weight gain, compared to other steroids which produce these effects in varying degrees. And McGavack,[2] in a comparative tabulation of steroid side effects, indicates that triamcinolone does not produce the increased appetite, insomnia, and psychic disturbances associated with other newer steroids.

ARISTOCORT can thus be advantageous for patients requiring corticosteroids whose appetites should not be stimulated, and for those who are already overweight or should not gain weight. Likewise, ARISTOCORT is suitable for the many patients with emotional and nervous disorders who should not be subjected to psychic stimulation. Furthermore, ARISTOCORT Triamcinolone, in effective doses, showed a low incidence of side reactions and is a steroid of choice for treating the older patient in whom salt and water retention may cause serious damage.[2]

References: 1. Hollander, J. L.: *J.A.M.A.* 172:306 (Jan. 23) 1960. 2. McGavack, T. H.: *Nebraska M. J.* 44:377 (Aug.) 1959. 3. McGavack, T. H.; Kao, K. Y. T.; Leake, D. A.; Bauer, H. G., and Berger, H. E.: *Am. J. M. Sc.* 236:720 (Dec.) 1958.

Precautions: Collateral hormonal effects generally associated with corticosteroids may be induced. These include Cushingoid manifestations and muscle weakness. However, sodium and potassium retention, edema, weight gain, psychic aberration and hypertension are exceedingly rare. Dosage should be individualized and kept at the lowest level needed to control symptoms. It should not exceed 36 mg. daily without potassium supplementation. Drug should not be withdrawn abruptly. Contraindicated in herpes simplex and chicken pox.

Supplied: Scored tablets—1 mg. (yellow); 2 mg. (pink); 4 mg. (white); 16 mg. (white).

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V. V. Anderson, new President-elect

Dr. V. V. Anderson, general practitioner from Del Norte, Colorado, was elected President-elect of the Colorado State Medical Society at the Society's annual meeting in Estes Park, September 17. He will be installed as President of the Society at the next annual session in September, 1961. Though with the same surname, he and Dr. Cyrus W. Anderson of Denver, current President of the Society, are not related.

Dr. V. V. Anderson is "practically a native" of Colorado. His family moved to Victor, Colorado, when he was six months old. He attended grade and high schools in Victor and for two years attended Colorado Agricultural College (now Colorado State University) at Fort Collins.

In 1932 he received his B.A. degree, and in 1936 his M.D., both from the University of Colorado. Until he was called into military service in May, 1941, Dr. Anderson practiced medicine with Dr. A. B. Gjellum in Del Norte.

The outbreak of World War II found Dr. Anderson stationed in the Philippines at Bataan. With the fall of Bataan, he was captured by the Japanese and participated in the infamous Bataan death march. For 18 months he was a prisoner of the Japanese in the Philippines and then was moved to a POW camp in Japan. During his entire imprisonment he provided medical and surgical care for fellow prisoners under the most adverse conditions.

For his distinguished military service, Dr. Anderson was awarded Bronze Stars by both the Army and Navy, the Bataan Medal of Honor from New Mexico, two Presidential Citations, Medical Combat Badge, and four Battle Stars.

After a three-month hospitalization immediately following his release in August, 1945, from the Japanese prison camp, he spent several months in postgraduate work in New York and Chicago. In June, 1946, he returned to practice in Del Norte.

As part of his civic activities, Dr. Anderson has participated in the emergency rescue unit of the State Highway Patrol in Del Norte. In this capacity he was called upon last year to participate in a daring rescue of two survivors of an airplane crash high in the mountains near Del Norte. With an Air Force pilot, Dr. Anderson flew into an area of treacherous air currents at an altitude far above the usual operating altitude for large helicopters. The rescue attempt was successful. For his participation Dr. Anderson was awarded the Sikorsky Medal for helicopter rescue. The Air Force pilot received the Distinguished Flying Cross.

Dr. and Mrs. Anderson and their three daughters, Sonia, Greta and Linda, are avid skiing enthusiasts. Their eldest daughter, Sonia, is a medical technologist at Presbyterian Hospital in Denver. Greta is a senior at Colorado State University and Linda a high school student in Del Norte.

The doctor is a Fellow of the International College of Surgeons, a member of the Southwestern Surgical Congress and the American Academy of General Practice. He is a past President of the San Luis Valley Medical Society and of the Colorado Division of the American Cancer Society. Currently he is a member of the Cancer Society's Executive Committee and of its Medical and Scientific Committee. He is President of his school board, a member of Rotary and serves on the Governor's Mental Health Committee.

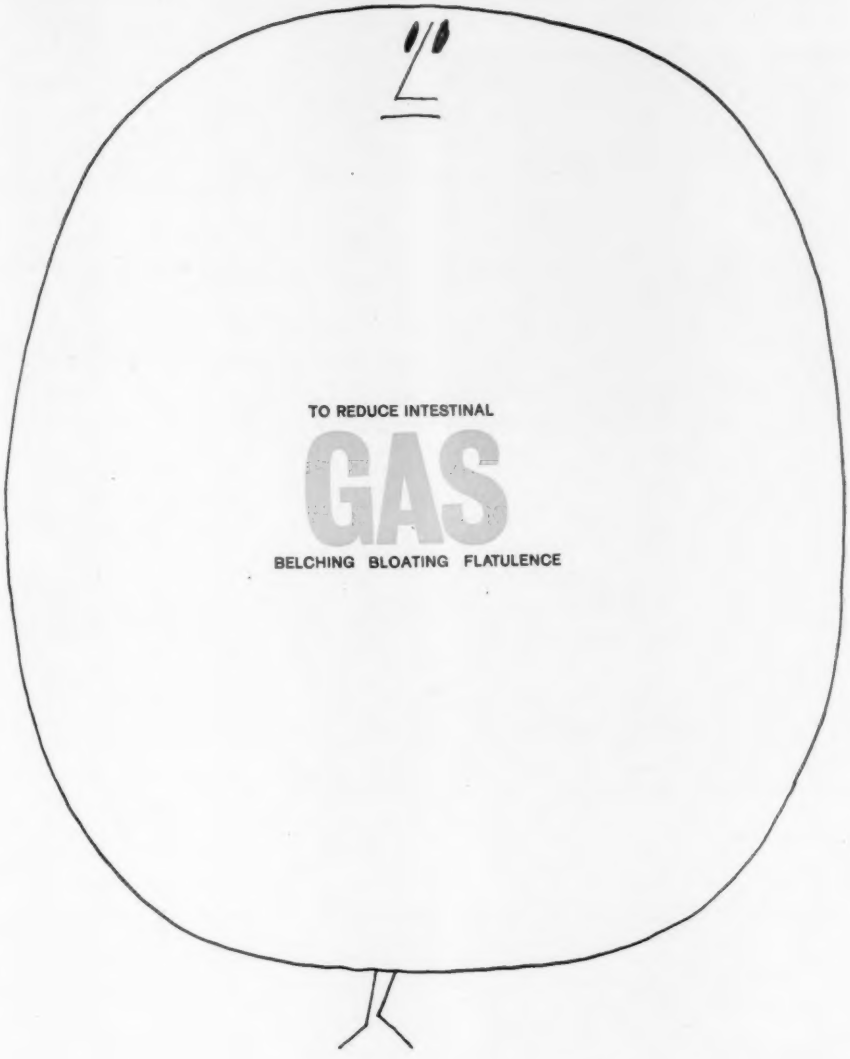
Dr. Anderson has been active in the Colorado State Medical Society for many years, serving several years as a member and last year as chairman of the Public Policy Committee, previously serving two terms on the Grievance Committee, and was Vice President of the Society during the administration of President C. C. Wiley.

New Deputy Commander assigned to Fitzsimons General Hospital

Col. O. Elliott Ursin, MC, has been named as deputy commander and chief of professional education at Fitzsimons General Hospital, Denver. He replaces Col. Urho R. Merikangas, MC, who retired last month.

Colonel Ursin came to Fitzsimons from duty as surgeon, Seine Area Command and commanding officer, U. S. Army Hospital, Paris.

A 1927 graduate of Suttons Bay (Mich.) High School, Colonel Ursin earned an A.B. degree from St. Olaf College, Northfield, Minn., and was awarded an M.D. degree by Washington University



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Medical School, St. Louis, in 1936. He took his internship training at St. Luke's Hospital, St. Louis.

Physicians retirement plan adopted by Colorado State Medical Society

Colorado State Medical Society officially launched its own retirement program for physicians with the signing of a Trust Indenture at the Society's annual meeting in Estes Park. Shown signing the document are, seated, left to right, Kenneth W. Caughey, Trust Officer at Colorado National Bank; John L. McDonald, M.D., CSMS President 1959-60. Standing, left to right: Harvey T. Sethman, CSMS Executive Secretary; Charles Henry, Trust Officer, Colorado National Bank; Carl W. Swartz, M.D., Chairman of CSMS Investment Trust Committee; J. Peter Nordlund, CSMS General Counsel; J. Merle Lemley, Plan Consultant and Coordinator; Cyrus W. Anderson, M.D., CSMS President 1960-61, and Stuart Ferris, Executive Vice President, Security Life and Accident Company.

Obituary

Untimely death takes William N. Baker

At the too-youthful age of 48, Dr. William N. Baker of Pueblo died October 4, 1960, from an attack of coronary occlusion as his colleagues were taking him to the hospital after his sudden collapse in his office at the Pueblo Clinic.

"Bill" Baker had headed the Pueblo Clinic in recent years, in the same position so long held by his late father, Dr. W. T. H. Baker. The love which went out to him from thousands of friends and patients and all of his colleagues was evidenced at the services held October 7 at the McCarthy Funeral Home when many hundreds who wished to attend could approach no closer than to stand in the blocked-off streets surrounding the mortuary.

William Nowers Baker was born December 21, 1911, in Pueblo, and after grade and high schools in his home city was graduated by Colorado College with an A.B. in 1933. His M.D. was granted by Northwestern University Medical School in 1938 following the first year of a two-year internship at Denver General Hospital. He chose general practice, though especially interested in surgery, and was with the Pueblo Clinic continuously thereafter except for war-time military service.

He entered the U. S. Army medical corps in 1942 as a First Lieutenant and served with distinction in the South Pacific as a member of a Pueblo-organized mobile surgical unit. He had to be hospitalized and returned home just before World War II ended, as the result of his participation in the swimming rescue of several airmen about to drown following crash of their military plane in a small South Pacific harbor. Following his recovery, he returned to active practice in the Pueblo Clinic and active leadership in the Pueblo County Medical Society. He served three terms as a member of the Board of Supervisors—later the Grievance Committee—of the Colorado State Medical Society. Dr. Baker was also active in the American Academy of General Practice, the International College of Surgeons, and the Southwestern Surgical Congress.

Dr. Baker is survived by his mother, his wife, and six children, all of Pueblo.

Traffic safety

Studies by The Travelers Insurance Companies show that driver error caused 85 per cent of the highways accidents in 1959.

"All I can say, sir, is that you should have kept your mouth shut when the baton came down!"

The physician listens to a tense, nervous patient discuss her emotional problems. To help her, he prescribes Meprospan® (400 mg.), the only continuous-release form of meprobamate.

The patient takes one Meprospan-400 capsule at breakfast. She has been suffering from recurring states of anxiety which have no organic etiology.

She stays calm while on Meprospan, even under the pressure of busy, crowded supermarket shopping. And she is not likely to experience any autonomic side reactions, sleepiness or other discomfort.

She takes another capsule of Meprospan-400 with her evening meal. She has enjoyed sustained tranquilization all day—and has had no between-dose letdowns. Now she can enjoy sustained tranquilization all through the night.

Relaxed, alert, attentive . . . she is able to listen carefully to P.T.A. proposals. For Meprospan does not affect either her mental or her physical efficiency.

Peacefully asleep . . . she rests, undisturbed by nervousness or tension. (Samples and literature on Meprospan available from Wallace Laboratories, Cranbury, N. J.)

Photos used with patient's permission.

How new Dianabol rebuilt muscle tissue in this underweight, debilitated patient

Patient was weak and emaciated before Dianabol. R. C., age 51, weighed 160 pounds following surgery to close a perforated duodenal ulcer. His convalescence was slow and stormy, complicated by pneumonia of both lower lobes. Weak and washed out, he was considered a poor risk for further necessary surgery (cholecystectomy). Because a conventional low-fat diet and multiple-vitamin therapy failed to build up R. C. sufficiently, his physician prescribed Dianabol 5 mg. b.i.d.

Patient regains strength on Dianabol. In just two weeks R. C.'s appetite increased substantially; he had gained 9½ pounds of lean weight. His muscle tone was improved, he felt much stronger. After 4 weeks, he weighed 176 pounds. Biceps measurement increased from 10″ to 11½″. For the first time since onset of postoperative pneumonia, his chest was clear. Mr. C.'s physician reports: "He tolerated cholecystectomy very well and one week postop felt better than he has in the past 2 years."

WYOMING

Obituary

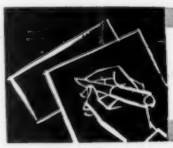
HERBERT T. HARRIS

Dr. Herbert T. Harris, 80, retired physician and long time resident of Basin, died Tuesday morning, August 23, 1960, at the South Big Horn County Hospital of a heart attack.

Dr. Harris was born in Piasa, Illinois, December 27, 1879. He received his M.D. degree from Creighton University in Omaha, Nebraska, May 5, 1902. Following graduation, as postgraduate training in medicine was almost nonexistant in the United States, he went abroad. After two years in Vienna, specializing in obstetrics, he went on to the Children's Hospital in London. There he developed tuberculosis and was ordered home.

In 1905, Dr. Harris arrived in Sheridan as company doctor for the Dietz Coal Company. In 1908, Dr. Harris joined his brother, Dr. George A. Harris, in medical practice in Basin. The practice grew and Dr. Chester Harris of Illinois joined the partnership. However, a short time thereafter, "Dr. George" returned to Nebraska and the team of "Dr. Chester" and "Dr. Bert" began their long collaboration. In 1938, increasing disability due to arthritis caused Dr. Harris' retirement from active practice.

Dr. Harris is survived by his wife and one son.



CORRESPONDENCE

"OOPS"

Dear Editor:

In the October issue of the *Journal* a book review written by me appeared. Unfortunately a printing error occurred. The book reviewed was *Physical Diagnosis* by Prior and Silberstein. I intended to use the word "inane" but an "s" crept in from somewhere and the word became "insane." The result was somewhat disastrous. The sentence containing the word should read:

"The illustrations, however, are not up to the quality of the written material, being for the most part uninformative sketches or normal individuals posing for demonstrations of different diagnostic procedures, some of which border on the inane."

John H. Clifford,
Senior Student,
University of Colorado

Clinical nutrition symposium

A symposium on clinical nutrition will be held in Washington, D. C., on November 30, 1960. This symposium, sponsored by the Council on Foods and Nutrition of the American Medical Association in cooperation with The Medical Society of the District of Columbia, will begin at 8:30 a.m., Wednesday, November 30, in Room B of the National Guard Armory. The meeting will be opened to all interested persons.

F.D.A. tightens control

Because the large number of new medications has made it increasingly difficult for physicians and pharmacists to keep adequately informed about them, the Federal Food and Drug Administration has tightened control of the drug industry with strict new regulations for labeling prescription drugs. Under the new requirements, manufacturers will put complete information regarding the use of a drug, its hazards, side effects, or necessary precautions that should be taken in its administration, on virtually all prescription drug packages and printed matter distributed to physicians.

Gastro-camera

A Japanese optical company is marketing a gastro-camera, about the size of the tip of the index finger, that photographs the inside of the human stomach. It contains its own light source and film supply and is attached to a slender instrument so it can be manipulated after being swallowed. The camera was developed at Tohoku University in Japan.

Traffic safety

Motor vehicle accidents killed 37,600 and injured 2,870,000 persons on U. S. highways during 1959.

There were 2,910 pedestrians killed and 66,030 injured on U. S. roads last year because they crossed between intersections.

In active people who won't take time to eat properly, MYADEC can help prevent deficiencies by providing comprehensive vitamin-mineral support. Just one capsule a day supplies therapeutic doses of 9 important vitamins plus significant quantities of 11 essential minerals and trace elements. MYADEC is also valuable in vitamin depletion and stress states, in convalescence, in chronic disorders, in patients on salt-restricted diets, or wherever therapeutic vitamin-mineral supplementation is indicated.

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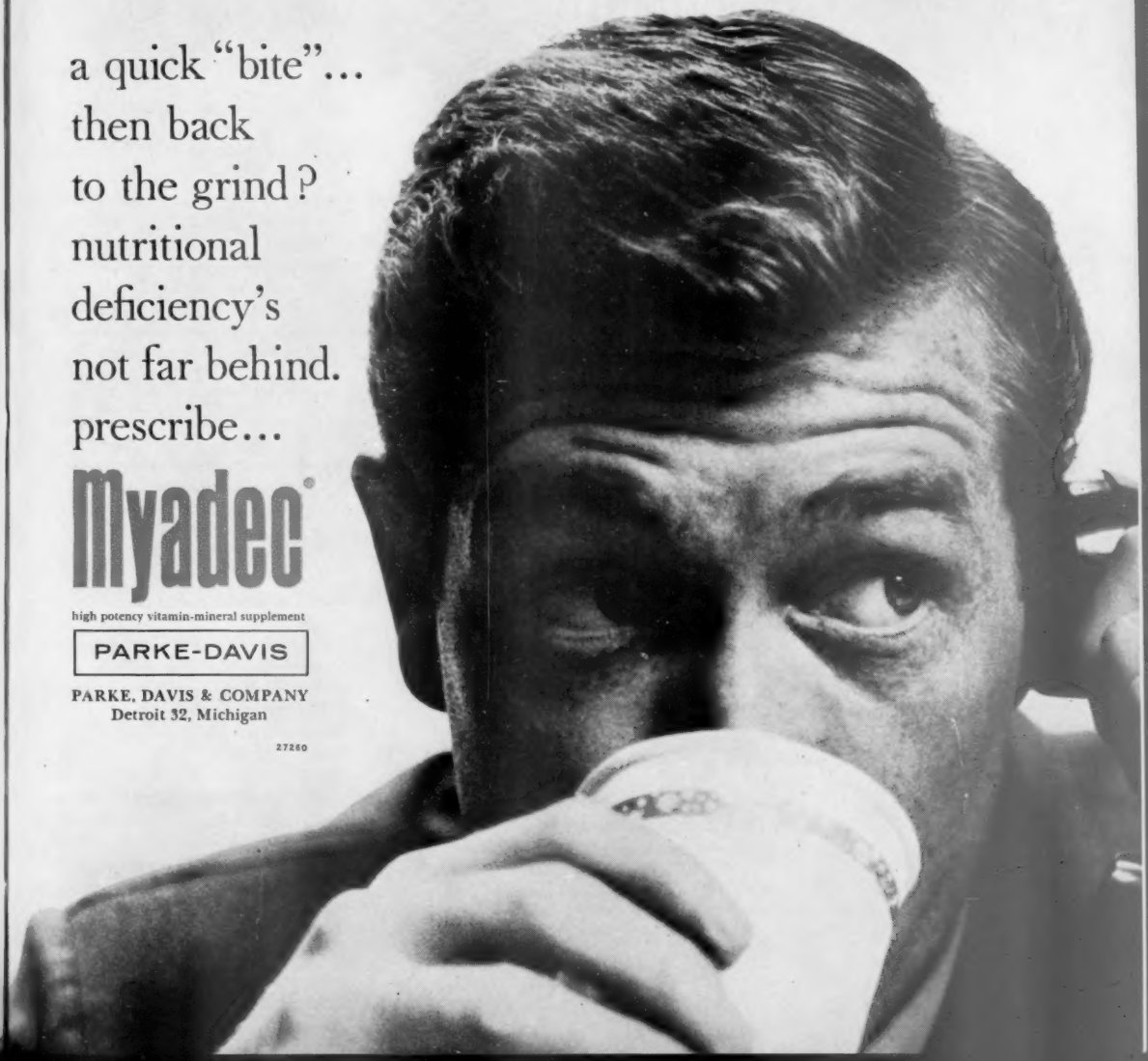

Non-specific ulcers of small intestine

Harold D. Palmer, M.D., Moderator

Elmer W. Koneman, M.D., Resident in Pathology*

Hemorrhage, perforation and obstruction can occur with both malignant and benign lesions in the intestine. An unusual case presenting with a lesion in the latter category is offered for discussion.

Case presentation

Dr. Robert Sawyer (Resident in Surgery): A 53-year-old white female was admitted to the hospital with a four-month history of abdominal distension, occasional loose stools and a pulling or dragging sensation in the lower abdomen. These symptoms had not been associated with colic, although vomiting occurred once or twice daily. Melena, hematemesis, or specific food intolerance were not noted. There had been an approximate 42-pound weight loss over the past four months. The past history was remarkable for frequent emotional upsets, and one bout of frank congestive heart failure which responded promptly to treatment with diuretics.

Physical examination upon admission revealed a well-developed, slightly emaciated white female in moderate distress. The blood pressure was 110/60, the pulse 90 per minute and irregular. The chest was clear to percussion and auscultation. The heart was enlarged with the PMI audible at the left anterior axillary line. A Grade II systolic murmur was audible along the left sternal border. The abdomen was distended and tympanitic to percussion. Hyperactive bowel tones were audible and peristaltic movements could be visualized through the thin abdominal wall. Dilated loops of small intestine were easily palpable. Abdominal tenderness or rebound pain could not be elicited and the patient did not seem to show pain with the peristalses. Pelvic and rectal examinations revealed a mass in the cul-de-sac, which was felt to be extra-uterine in nature, probably associated with the adnexae.

The admission hemoglobin was 11.45 grams and the hematocrit was 39 volumes per cent. The white blood count was 7000 with a normal differential. Admission urinalysis was not remarkable with the exception of a few white blood cells in the urine sediment. The total serum protein was 7.4 grams per cent (5.2 grams per cent albumin, 2.2 grams per cent globulin). Serum electrolytes, including sodium, potassium and chlorides, and the blood urea nitrogen determinations were within the range of normal. The potassium level was 3.75 and 3.55 meq. per liter on separate determinations. Procto-sigmoidoscopy was unrevealing up to 15 cm.

X-ray presentation

Dr. James List (Resident in Radiology): An upper gastro-intestinal examination, including a small bowel study, revealed dilated loops of the distal jejunum and proximal ileum. Active peristalsis, both forward and backward, was noted. This x-ray picture is most commonly caused by mechanical small bowel obstruction; however, it

*Supported by grant from the Frieda L. Maytag Memorial Cancer Fund, Colorado Division, American Cancer Society.

may also be produced by medications such as narcotics and ganglionic blocking agents and may be seen in hypopotassemia. We were told that this patient had questionable hypokalemia and we were unable to conclude with this study that mechanical obstruction was present.

Surgery

Dr. B. T. Daniels: This patient was one year postmenopausal and the vague nonspecific symptoms were further clouded by considerable psychological overlay. Despite this, it became evident with time that surgical exploration was necessary.

Upon opening the abdomen, we discovered a six-centimeter in length constriction of small bowel lying within the pelvis. We were most surprised to see this lesion because it had produced almost complete obstruction with dilated loops of bowel noted proximally. This area was located approximately 18 inches or two feet from the ileocecal valve and had the classical appearance of an isolated lesion of regional enteritis. The bowel serosa was covered with a gray-white fibrinous exudate which extended to involve the adjacent mesentery. Adjacent mesenteric lymph nodes were also moderately enlarged. A careful search of the remaining small bowel failed to reveal similar lesions. A large hemorrhagic area, obviously endometriosis, was noted adjacent to the left ovary, which also was bound to the bowel lesion by dense fibrinous adhesions. A portion of small bowel to include the area of obstruction was resected and, because of the dilatation of the proximal bowel, an end-to-side anastomosis was done. Because of the endometriosis, a total hysterectomy and bilateral salpingo-oophorectomy were also performed. The patient did very well postoperatively and only last week was in my office showing considerable physical and mental improvement.

Pathology

Dr. Normal Welch (Resident in Pathology): On gross examination, dense adhesions were noted between the uterus, fallopian tubes, and ovaries. The left ovary contained a 3 cm. cyst filled with brown semisolid material and lined by dull gray tissue.

The constriction in the mid-portion of the small bowel specimen had caused almost complete obstruction. Upon opening the bowel, a 2 cm. in diameter ulcer was found at the point of constriction. The base of the ulcer was covered with mucopurulent exudate and cultures from the ulcer failed to grow acid fast bacilli or other pathogenic bacteria. Three lymph nodes were present in the adjacent mesentery measuring up to 1.4 cm. in diameter.

Microscopic examination of the corpus uteri revealed several foci of endometrial tissue within the myometrium. Implants of endometrial tissue were also found in both ovaries and the cyst of the left ovary was endometrial in origin. The ulcer in the ileum presented sharp edges and the ulcer bed was necrotic. Beneath this and extending into the surrounding tissue was dense fibrous tissue heavily infiltrated with chronic inflammatory cells. The wall of the gut presented no evidence at all of endometriosis. The fibrosis had replaced all the normal structures of the wall. The lymph nodes presented only reactive hyperplasia.

Anatomical diagnosis

Ulcer, nonspecific, chronic, ileum.
Endometriosis, bilateral, ovaries.
Adenomyosis, corpus uteri.

Moderator: Dr. McGlone, you saw this patient from the beginning. Do you have anything to add?

Dr. F. B. McGlone: This was a very interesting clinical problem and the patient was seen by numerous consultants before operation was decided upon. After seeing the pathology and then comparing it with the x-ray films, one might wonder why there was ever any question of what to do. The patient's clinical story did not fit an acute mechanical obstruction and this fact delayed surgery. The films revealed marked dilatation of the small intestine with preservation of the mucosal and muscular markings, suggesting progressive dilatation and hypertrophy of the intestinal wall as seen in chronic bowel obstruction. Significant to me was the presence of marked peristaltic activity which you could actually see upon physical examination. To me, this is not the picture one sees in sprue, or secondary to drug administration or potassium deficiency as previously discussed. Peristaltic activity should be absent in ileus secondary to drugs or potassium deficit. Despite this, however, I was surprised at the extent of the pathology found.

In considering the cause of chronic small bowel obstruction, one should clinically suspect endometriosis if the patient is a woman, since statistically this is one of the most common causes. However, in discussing the microscopic findings with the pathologist, it did not seem to me that endometriosis was the cause in this case. It would be unusual for regional enteritis to give this type of clinical picture. Neoplasms such as carcinoids or metastatic carcinoma from elsewhere in the digestive tract can produce progressive chronic small bowel obstruction.

The presence of ulceration in this case is interesting in that there have been reported in the literature about 160 cases of an entity known as non-specific ulcers of the small intestine. It may be somewhat incorrect to consider these as nonspecific ulcers because for all purposes these lesions resemble peptic ulcers, although there is no reason for tryptic or peptic activity to be present at this site. So far as I know, nobody has been able to determine the etiological factors. These ulcers can occur anywhere along the small bowel and are most commonly solitary. The usual presenting symptom and the finding that leads to the discovery of the condition is bleeding. I have had one other patient with a similar lesion in

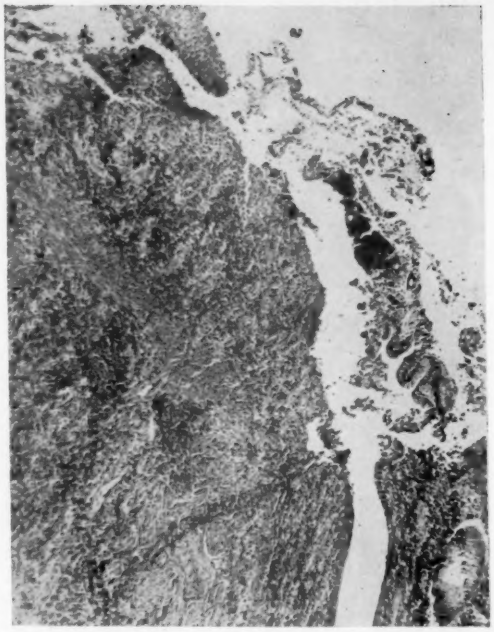

Fig. 1. Base of ulcer showing necrosis with underlying fibrosis and lymphocytic infiltration. (H&E X 50)

which the diagnosis was made only at surgery after the patient had experienced four successive small bowel hemorrhages.

Dr. Welch: I would like to describe several features of primary non-specific ulcer of the small intestine which have been reported in the recent literature[1,2,3]. The ulcers are three times as common in men as women and may occur at any age. They are usually oval in shape and range up to 4 cm. in diameter. The appearance of these ulcers is essentially the same as described in this case and is very similar to peptic ulcers. Evidence of healing and fibrosis is always present and it is this fibrosis which leads to obstruction (Fig. 1). Peritoneal reactions occur which result in adhesion of the bowel to other surfaces.

The etiology of these non-specific ulcers is unknown. Investigation for a relationship to trauma, infection, infarction, gastric heterotopia, or peptic tryptic digestion has been unrevealing.

The preoperative diagnosis of this entity is difficult but a small bowel ulcer should be suspected when other causes of upper gastro-intestinal bleeding and intestinal obstruction cannot be found. Since these ulcers are usually solitary and seldom recur following removal, the treatment of choice is segmental resection of the involved portion of bowel as soon as possible.

Moderator: Dr. Donovan, would you elaborate

on the differential diagnosis of chronic small bowel ulcers and regional enteritis?

Dr. E. J. Donovan: I do not quite know how to differentiate chronic ulcers of the small bowel from regional enteritis except that from every standpoint this case fits the pathological description of cases of non-specific ulcer. These have been described as punched out ulcers without heaped up borders with an associated peritoneal inflammatory reaction. Originally most of these ulcers were described on the basis of typhoid fever, but now in the absence of an apparent etiological agent, have been classified as primary non-specific lesions. Originally, most of the cases were diagnosed as a result of complications; namely, hemorrhage, perforation and bleeding. Perforation was especially common in early isolated case reports; however, as more and more are collected as a group, it is found that bleeding and pain are more common. I have seen two of these cases, both of which were associated with bleeding. It should be thought of in any patient who presents an ulcer type of syndrome in whom you are unable to demonstrate an ulcer, or in any patient with persistent occult blood in the stools. Most patients have vague complaints over some period of time which is usually not the case with regional enteritis. Regional enteritis would not be confused pathologically. Ulcers associated with regional enteritis are not as deep as those described in non-specific ulceration and do not have the tendency to perforate. There is more of an inflammatory reaction within the wall of the bowel in regional enteritis and the lesions commonly are multiple and progressive. In regional enteritis there is usually marked involvement of the mesenteric lymph nodes which you do not see with non-specific ulcers unless there is secondary inflammation.

Dr. P. K. Hamilton: I saw one of these cases a couple of years ago in a young university student who was a very compulsive obsessive boy. He presented with recurrent hematemesis but nothing could be found radiologically. An exploratory laparotomy was performed and a small area in the terminal ileum looked suspicious to the surgeon. Upon opening the bowel, about 25 small mucosal ulcers ranging between 0.4 and 1.0 cm. in diameter were found. This portion of the ileum was resected and the patient was cured for one year, when there was recurrence. Many of the reviews on non-specific ulceration of the small bowel stress the personality aberrations in many of these patients, some being the chronic ulcerative colitis type of individual. It is conceivable that we miss a lot of these non-specific ulcers which heal and do not recur.

Moderator: Dr. Hammer, will you give us the roentgenological aspects of this lesion?

Dr. R. W. Hammer: Simple ulcers of the small bowel are probably not easily diagnosed, as such, by routine small bowel examinations. Perforation and obstruction secondary to these ulcers lead to positive radiographic findings that are non-specific in etiology. The patient presented had findings of a partial small bowel obstruction. Hypokalemia also can cause an ileus closely simulating partial small bowel obstruction. Since there was a question of hypokalemia in this case, we felt that it had to be excluded before a definite diagnosis of partial small bowel obstruction could be made.

Dr. McGlone: One other technic I would like to ask about is the possibility of using a Miller-Abbott tube to outline lesions at the site of obstruction. Since the terminal ileum was not well outlined roentgenographically in this case, this procedure may have had some merit.

Dr. Hammer: In patients with complete or partial small bowel obstruction, a Miller-Abbott tube can be passed to the site of obstruction and the obstructing lesion outlined by injection of opaque media through the tube. This technic is useful in selected cases and conceivably a lesion such as we are discussing today might be diagnosed with some degree of specificity. However, the use of the Miller-Abbott tube for diagnosis of small bowel obstruction is not recommended as a routine procedure.

Dr. Palmer: I remember reading of two cases reported from New Orleans in which the diagnosis of non-specific ulcer of the intestine was made through the use of the Miller-Abbott tube in another way. The progress of the tube was followed by periodic aspiration until a point of hemorrhage was localized. The ulcer was then visualized in the manner discussed by Dr. Hammer. However, this requires almost constant attention and may be impractical in most cases.

Dr. R. E. McCurdy: The presence of active peristalsis was an important feature of this patient's history, which in my experience does not occur in cases of ileus which are not caused by mechanical obstruction.

Dr. Hammer: Peristalsis can be present in adynamic ileus but is never as active as in mechanical obstruction. Certainly, the presence of strong active peristalsis is an indication of mechanical obstruction when other signs of ileus are present.

Dr. McCurdy: No one has mentioned the possibility of a Meckel's diverticulum. The lesion described in this case is in the right position and ulceration with bleeding are known to occur in Meckel's diverticulum.

Dr. Palmer: There was nothing reminiscent of an omphalomesenteric duct remnant on gross examination of the specimen. Moreover, ulceration in a Meckel's diverticulum always occurs in foci of ectopic gastric mucosa which we did not see upon histological examination in this case.

Dr. H. S. Maul: I think you people are real optimists in trying to make this one of those 160 rare cases reported. From the description of the lesion given, it is apparent that the whole picture

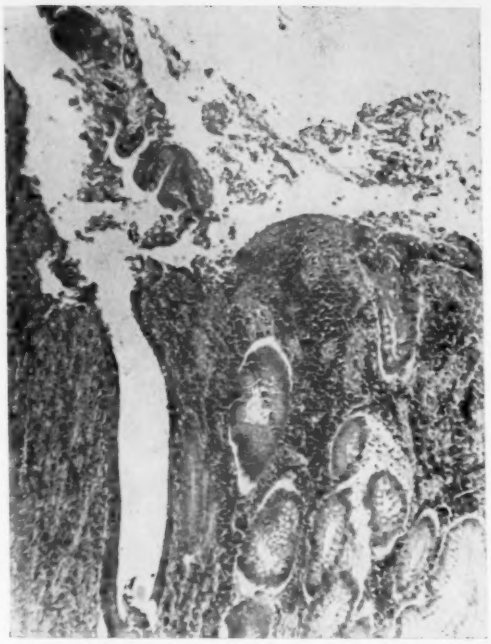

Fig. 2. Margin of ulcer showing attempt at healing (see text). (H&E X 75)

could be accounted for by the endometriosis.

Dr. Palmer: We were unable to demonstrate endometrial tissue in the small bowel lesion. I think it would have been there if it were the etiological condition since the endometriosis in the ovary was very active. The serosal and peritoneal reaction of the bowel also was not associated with endometrial tissue. Serosal inflammation is characteristically seen in non-specific ulcers and this can readily account for the adhesions between ileum and ovary.

Dr. K. C. Sawyer: Although endometriosis may cause small bowel obstruction through serosal fibrosis, it would be most unusual for endometriosis to cause ulceration and bleeding of the mucosa. Only a very few cases of small bowel obstruction secondary to intraluminal endometriomas have been reported.

Dr. Daniels: Dr. Palmer, I thought I saw an endometrial gland adjacent to the ulcer in one of the slides you projected.

Dr. Palmer: I think what you saw represents healing with an attempt at re-epithelialization of the surface of the ulcer (Fig. 2). You will note that the epithelium forming the gland-like structure is continuous with the surface mucosal cells and that goblet cells are present in the structure.

Moderator: We have dealt this morning with a case of non-specific ulcer of the ileum which caused obstruction and occurred in a 53-year-old woman who also suffered from endometriosis. In spite of the fact that the ileum at the point of ulceration was bound to the endometriotic right ovary, the consensus is that the endometriosis is an incidental finding.

Supposed to be rare, it has developed during this conference that four cases of non-specific ulcer of the small intestine, in addition to the one which was presented, have been studied by members of the conference (Dr. McGlone, two; Dr. Donovan, two; Dr. Hamilton, one).

Those who have studied these cases conclude that symptoms and signs suggesting peptic ulcer with negative x-ray evidence of ulcer and/or unexplained bleeding from the gastrointestinal tract should lead one to consider this entity. They also point out that hemorrhage, obstruction and perforation, in that order, are common complications. The consensus also is that surgical resection of the involved segment of bowel is the treatment of choice.

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[3]Morlock, C. G., Goehrs, H. R., and Dockerty, M. G.: Primary non-specific ulcers of the small intestine: clinicopathologic study of 18 cases with follow-up of 14 previously reported cases. Gastroenterology, 31:667, 1956.

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THE BOOK CORNER

New books received

New books received are acknowledged in this section. From these, selections will be made for reviews in the interests of the readers. Books here listed will be available for lending from the Denver Medical Library soon after publication.

Medicine Today: A Report on a Decade of Progress: By Marguerite Clark. New York, Funk & Wagnalls, 1960. 360 p. Price: $4.95.

Tumors of Childhood: By H. W. Dargeon, M.D. New York, Hoeber, 1960. 476 p. Price: $20.00.

The Office Assistant in Medical Practice: By P. M. Frederick and C. Towner. 2d ed. Philadelphia, Saunders, 1960. 207 p. Price: $5.25.

Current Surgical Management II: Edited by J. H. Mulholland, M.D., and others. Philadelphia, Saunders, 1960. 348 p. Price: $8.00.

I Prescribe Laughter: By T. R. Reese, M.D. New York, Vantage, 1960. 111 p. Price: $2.75.

The List Method of Psycho-therapy: By Elizabeth Sher, and others. New York, Philosophical Library, 1960. 258 p. Price: $7.50.

The Inspection of Food: A handbok for students of public health, agriculture and meat technology: By H. Thornton, B.V.Sc., DVH. 2d ed. London, Ballier Tindal & Cox, 1960. 213 p. Price: $3.75.

Office Diagnosis: By Paul Williamson, M.D. Philadelphia, Saunders, 1960. 470 p. Price: $12.50.

Book reviews

That the Patient May Know: By Henry F. Dowling, M.D., and Tom Jones, B.F.A. Phila., W. B. Saunders Co., 1959. 139 p. Price: $7.50.

The purpose of this atlas is to help the physician explain to the patient his condition or conditions. The authors have not attempted to be all-inclusive.

In practice it has been found necessary often to supplement the drawings or pictures in the atlas with drawings to explain the pathological conditions found on the examination and study of the patient. Such commonly encountered conditions as hiatus hernia require further explanation for the average patient.

It is believed that the text represents a step forward toward our goal of helping the patient understand so that he may become a better patient. It is felt that physicians should not purchase this text feeling that it will completely accomplish their purpose. It is believed that the price is reasonable. E. Bruce Badger, M.D.

Encyclopedia of Medical Syndromes: By Robert H. Durham, M.D. New York, Paul B. Hoeber, Inc., 1960. 628 p. Price: $13.50.

With the exception of the osteology course, there are few ordeals more dreaded by the harassed medical student than the memorizing of eponyms and the disease arrays associated with them. The field of neurology is particularly notorious in this respect. Yet eponyms are a necessary evil, not only insofar as they are justly in-

tended to pay tribute to certain perspicacious individuals, but also because even a partially satisfactory designation for an ailment complex is frequently impossible. It does not take long for the student to appreciate that the term "Klauder's syndrome" is less trying to the tongue and palate than verbiage such as "ectodermis erosiva pluriorificialis syndrome." The rub arises when the eponymic title becomes dissipated in the mists of forgetfulness, only to be sought for when the physician encounters one or more cases presenting an apparently similar pattern. One has been spared scalp-scratching and forehead-slapping by the appearance of Dr. Robert H. Durham's "Encyclopedia of Medical Syndromes."

The encyclopedia represents an heroic piece of labor, encompassing almost 1,000 recognized entities arranged in an intelligible and pragmatic manner. It is the only such work extant in the English language, and fulfills a real need of long standing. The compiler's descriptions are concise, and various features of diagnosis and management are discussed succinctly from a current vantage point. The numerous items, arranged alphabetically, are generously cross-referenced by synonyms, and analogous disorders are cited. In addition, there is provided a convenient index by anatomic and physiologic classification.

Because the author has been careful to define what he chooses to consider a "syndrome," in contradistinction to a "disease," Christmas disease has not been included, but omissions such as this are few indeed. The reader who studies the book for enjoyment will encounter syndromes which, in their names at least, reach for the far bizarre. Of these may be mentioned the Alice-in-Wonderland syndrome, crocodile tears syndrome, bull-dog scalp syndrome, and ear-wagging syndrome. Also, he will find that the "fallen women" syndrome is not what it may imply semantically.

The main criticism which the reviewer has of this otherwise eminently useful book is Dr. Durham's selection of references. It is best for the encyclopedist, unless he is trying to emulate Samuel Johnson, to be purely objective in his material. Dr. Durham's references in most instances are culled from the modern literature, thus representing a choice of articles which, in his opinion, tell the story best. Notwithstanding, Addison's classical account of his namesake syndrome has scarcely ever been surpassed, and the same holds true of many other masters of keen observation and description. Such a regrettable shortcoming will be of significance only to the medical historian, who may overcome it to some extent by searching through "Kelley's Source-Book of Medical References." To the busy student or practitioner, however, this will be but a minor imperfection in a functional and excellent work which will undoubtedly hold a place of honor among other medical lexicons and thesauri on his desk.

David Chas. Schechter, M.D., Denver

The Colorado State Medical Society*

Midwinter Clinical Session, February 28 through March 3, 1961, Denver

President: Cyrus W. Anderson (Chairman of the Board), Denver.
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Vice President: Sam W. Downing (Vice Chairman of the Board), Denver.
Treasurer: William C. Service, Colorado Springs, 1962.
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Executive Secretary: Mr. Harvey T. Sethman, 835 Republic Building, Denver 2, Colorado; telephone AComa 2-0547.

Montana Medical Association*

Interim Session, April 7-8, 1961
Helena

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Vice President: Harold W. Fuller, Great Falls.
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Assistant Secretary-Treasurer: Albert L. Vadheim, Jr., Bozeman.
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Alternate Delegate to the A.M.A.: S. C. Pratt, Miles City.
Executive Secretary: Mr. L. R. Hegland, P.O. Box 1692, Billings; telephone 9-2585.

Nevada State Medical Association*

Annual Meeting, August 23-26, 1961
Reno

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Delegate to American Medical Association: Wesley W. Hall, Reno; alternate: Earl N. Hillstrom, Reno.
Executive Committee: Wesley W. Hall, Reno; James N. Greear, Jr., Reno; Ernest W. Mack, Reno; William A. O'Brien, III, Reno; Earl N. Hillstrom, Reno; John M. Moore, East Ely; John M. Read, Elko; William M. Tappan, Reno; Thomas S. White, Boulder City.
Executive Secretary: Mr. Nelson B. Neff, P.O. Box 2790, Reno; telephone FA. 3-6788.

New Mexico Medical Society*

Annual Meeting, May 17-20, 1961
Santa Fe

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Vice President: R. C. Derbyshire, Santa Fe.
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Speaker, House of Delegates: C. Pardue Bunch, Artesia.
Vice Speaker, House of Delegates: Omar Legant, Albuquerque.
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Delegate to American Medical Association: Earl L. Malone, Roswell; Alternate: Leland S. Evans, Las Cruces.
Executive Secretary: Mr. Ralph R. Marshall, 220 First National Bank Building, Albuquerque; telephone CH. 2-2102.

*Committee lists for all participating states will appear in subsequent issues.

The Utah State Medical Association

Annual Session, September 13-15, 1961
Salt Lake City

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COMMITTEE FOR STUDY OF MATERNAL MORTALITY: Carl T. Woolsey, Chairman, Salt Lake City; R. V. Larsen, Roosevelt; Donald A. Kirk, Salt Lake City; Milo C. Moody, Spanish Fork; Cyril D. Fullmer, Salt Lake City; Eric E. Simonson, Salt Lake City; Agnes J. Rovnanek, Salt Lake City; Wilber S. Thain, Logan; Russell N. Stirland, Ogden; Boyd J. Farr, Ogden; Quinn A. Whiting, Price; W. R. Worley, Jr., Richfield; J. Gordon Felt, Brigham City; Richard S. Clark, Provo; Irwin H. Kaiser, Salt Lake City.

CONSTITUTION AND BY-LAWS COMMITTEE: Robert G. Snow, Chairman, Salt Lake City; Mr. Grant Aadnesen, Salt Lake City; I. Bruce McQuarrie, Ogden; U. R. Bryner, Salt Lake City; Drew M. Petersen, Ogden; Kenneth B. Castleton, Salt Lake City; George M. Fister, Ogden; Wallace S. Brooke, Salt Lake City; Ralph E. Jorgenson, Provo.

DISASTER AND CIVIL DEFENSE COMMITTEE: Paul D. Keller, Chairman, Salt Lake City; Richard J. Nelson, Salt Lake City; Joseph O. Brewerton, Salt Lake City; Leslie J. Paul, Salt Lake City; Arley Flinders, Ogden; Preston J. Burnham, Salt Lake City; Clark Young, Salt Lake City; Hallard B. Harmon, Salt Lake City; Gail W. Haut, Price; Rex T. Thomas, Provo; Chester B. Powell, Salt Lake City.

EXECUTIVE COMMITTEE OF THE FEE SCHEDULE COMMITTEE: Homer E. Smith, Chairman, Salt Lake City; U. R. Bryner, Salt Lake City; Kenneth B. Castleton, Salt Lake City; Drew M. Petersen, Ogden; J. Russell Smith, Provo; I. Bruce McQuarrie, Ogden; Mr. Harold Bowman, Salt Lake City; Ralph E. Jorgenson, Provo.

FEE SCHEDULE COMMITTEE: Homer E. Smith, Chairman, Salt Lake City; Dean A. Moffat, Salt Lake City; Scott M. Smith, Salt Lake City; William J. Morginson, Salt Lake City; James A. Cleary, Salt Lake City; Preston G. Hughes, Spanish Fork; W. P. Daines, Ogden; Chester B. Powell, Salt Lake City; Eugene Wood, Salt Lake City; Dean Spear, Salt Lake City; Louis S. Perry, Ogden; Richard A. Call, Provo; Roy A. Darke, Salt Lake City; Stanley R. Child, Salt Lake City; Howard K. Belnap, Ogden; Robert R. Robinson, Jr., Salt Lake City; Robert G. Weaver, Salt Lake City; Warren B. West, Ogden; Preston R. Cutler, Salt Lake City; Floyd F. Hatch, Salt Lake City.

HOSPITAL RELATIONS COMMITTEE: George H. Curtis, Chairman, Salt Lake City, 1962; Drew M. Petersen, Ogden, 1961; Russell M. Nelson, Salt Lake City, 1961; John H. Clark, Salt Lake City, 1962; John J. Galligan, Salt Lake City, 1962; A. H. Fechner, Salt Lake City, 1963; George W. Gasser, Logan, 1963; E. F. Barr, Provo, 1963. John N. Zenger, Chairman, Provo; S. G. Garrett, Logan; Sister M. Hilary, Salt Lake City; Kenneth E. Knapp, Ogden; Sister Mary Margaret, Ogden; Mrs. Olive V. Wardrup, Salt Lake City; Mr. Arthur Miller, Salt Lake City.

NURSING COMMITTEE: J. D. Mortenson, Chairman, Salt Lake City; Edward R. McKay, Salt Lake City; R. N. Hirst, Ogden; Lloyd L. Cullimore, Provo; Rulon F. Howe, Ogden; Robert J. Beveridge, Salt Lake City.

LIAISON COMMITTEE WITH UTAH BAR: Louis E. Viko, Chairman, Salt Lake City; John F. Waldo, Salt Lake City; Dean Spear, Salt Lake City; C. C. Hetzel, Ogden.

MEDICAL ADVISORY BOARD TO UTAH WELFARE DEPARTMENT: John Z. Brown, Jr., Chairman, Salt Lake City; John A. Dixon, Ogden; George W. Gasser, Logan; Paul A. Clayton, Salt Lake City; Victor Kassel, Salt Lake City.

MEDICAL ADVISORY BOARD TO THE UNIVERSITY OF UTAH COLLEGE OF MEDICINE: U. R. Bryner, Chairman, Salt Lake City; *Philip B. Price, Salt Lake City; Reed W. Farnsworth, Cedar City; I. Bruce McQuarrie, Ogden; Wallace S. Brooke, Salt Lake City; M. Paul Southwick, Ogden; Fuller B. Bailey, Salt Lake City; *Louis S. Goodman, Vice Chairman, Salt Lake City; *Mr. Clarence Bamberger, Salt Lake City; *M. E. Lahey, Salt Lake City; *President A. Ray Olpin, Salt Lake City; R. P. Middleton, Salt Lake City; *George M. Fister, Ogden; *Leland B. Flint, Salt Lake City.
*Represents University of Utah.

MEDICAL ADVISORY COMMITTEE TO REHABILITATION: Burke M. Snow, Chairman, Salt Lake City; Harold C. Jenkins, Bingham Canyon; Andrew Lee Karavitis, Salt Lake City; Agnes J. Rovnanek, Salt Lake City; Sherman S. Coleman, Salt Lake City; Charles M. Swindler, Ogden; Boyd J. Larsen, Lehi; John R. Ward, Salt Lake City; Wayne M. Hebertson, Salt Lake City; Talmage W. Nielson, Salt Lake City; Joseph P. Kesler, Salt Lake City; Nephi K. Kezerian, Provo; Robert H. Lamb, Salt Lake City.

MEDICAL ECONOMICS COMMITTEE (No chairman named on this committee): J. Herbert Millburn, Tooele, 1961; Riley G. Clark, Provo, 1961; De J. Cutler, Layton, 1962; Reed M. Broadbent, Logan, 1962; Myron L. Crandall, Salt Lake City, 1963; Juel E. Trowbridge, Bountiful, 1963.

MEDICAL EDUCATION AND HOSPITAL COMMITTEE: Charles M. Parrish, Chairman, Salt Lake City, 1963; John M. Bowen, Provo, 1961; O. Wendell Budge, Logan, 1961; C. H. Hardin Branch, Salt Lake City, 1961; Robert M. Crowder, Salt Lake City, 1961; L. D. Nelson, Ogden, 1962; V. Robert Kelly, Layton, 1962; Fuller B. Bailey, Salt Lake City, 1962; Sims E. Duggins, Panguitch, 1962; A. H. Fechner, Salt Lake City, 1962; Philip B. Price, Salt Lake City, 1963; John F. Waldo, Salt Lake City, 1963; C. Hilmon Castle, Salt Lake City, 1963; H. M. Jackson, Salt Lake City, 1963.

MEDICAL LEGAL COMMITTEE: Chester B. Powell, Chairman, Salt Lake City, 1961; Robert H. Lamb, Salt Lake City, 1961; George C. Ficklin, Tremonton, 1961; T. R. Seager, Vernal, 1961; Quinn A. Whiting, Price, 1961; Ernest L. Wilkinson, Salt Lake City, 1961; W. A. Bennett, Ogden, 1962; C. D. Van Hook, Ogden, 1962; Paul D. Keller, Salt Lake City, 1962; John W. Emmett, Logan, 1962; John N. Henrie, Salt Lake City, 1963; Robert M. Woolf, Salt Lake City, 1963; Richard R. Riley, Kanab, 1963; Wallace R. Johnson, Tooele, 1963; Orson W. White, Salt Lake City, 1963.

NECROLOGY COMMITTEE: Arthur J. Murphy, Chairman, Salt Lake City.

NOMINATING COMMITTEE: Same as Council.

RESOLUTIONS COMMITTEE: To be named in May, 1961.

ROCKY MOUNTAIN MEDICAL CONFERENCE CONTINUING COMMITTEE: R. N. Hirst, Chairman, Ogden, 1961; Kenneth A. Crockett, Salt Lake City, 1962; T. E. Robinson, Salt Lake City, 1963; C. Hilmon Castle, Salt Lake City, 1964; George H. Curtis, Salt Lake City, 1965. continued on page 124

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